

Figure 1

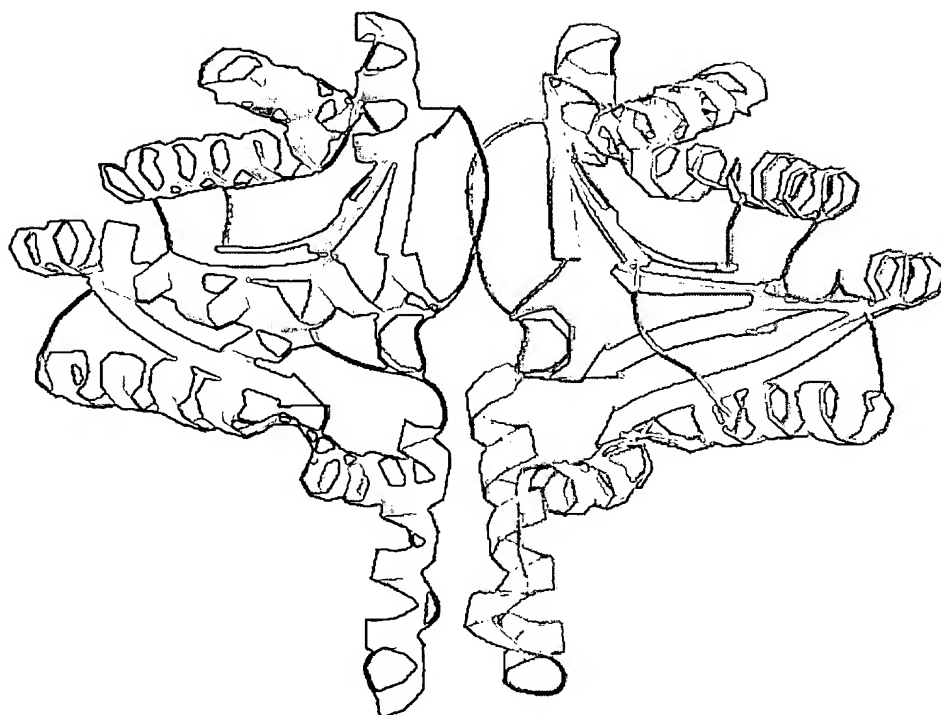


Figure 2-1

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HEADER      ----          XX-XXX-XX   xxxx
COMPND      ---
REMARK      3
REMARK      3 REFINEMENT.
REMARK      3   PROGRAM       : REFMAC 5.0
REMARK      3   AUTHORS        : MURSHUDOV,VAGIN,DODSON
REMARK      3
REMARK      3   REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK      3
REMARK      3 DATA USED IN REFINEMENT.
REMARK      3   RESOLUTION RANGE HIGH (ANGSTROMS) :   2.30
REMARK      3   RESOLUTION RANGE LOW  (ANGSTROMS) :  20.00
REMARK      3   DATA CUTOFF   (SIGMA(F)) : NONE
REMARK      3   COMPLETENESS FOR RANGE       (%) :  97.54
REMARK      3   NUMBER OF REFLECTIONS       :   26588
REMARK      3
REMARK      3 FIT TO DATA USED IN REFINEMENT.
REMARK      3   CROSS-VALIDATION METHOD           : THROUGHOUT
REMARK      3   FREE R VALUE TEST SET SELECTION : RANDOM
REMARK      3   R VALUE      (WORKING + TEST SET) : 0.28866
REMARK      3   R VALUE      (WORKING SET) :   0.28610
REMARK      3   FREE R VALUE           :   0.33622
REMARK      3   FREE R VALUE TEST SET SIZE (%) :   5.1
REMARK      3   FREE R VALUE TEST SET COUNT      :   1420
REMARK      3
REMARK      3 FIT IN THE HIGHEST RESOLUTION BIN.
REMARK      3   TOTAL NUMBER OF BINS USED      :    20
REMARK      3   BIN RESOLUTION RANGE HIGH      :   2.300
REMARK      3   BIN RESOLUTION RANGE LOW       :   2.359
REMARK      3   REFLECTION IN BIN      (WORKING SET) :    1804
REMARK      3   BIN R VALUE      (WORKING SET) :   0.372
REMARK      3   BIN FREE R VALUE SET COUNT      :           94
REMARK      3   BIN FREE R VALUE           :   0.487
REMARK      3
REMARK      3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK      3   ALL ATOMS           :    3487
REMARK      3
REMARK      3 B VALUES.
REMARK      3   FROM WILSON PLOT (A**2) : NULL
REMARK      3   MEAN B VALUE      (OVERALL, A**2) :  54.098
REMARK      3   OVERALL ANISOTROPIC B VALUE.
REMARK      3     B11 (A**2) :    1.98
REMARK      3     B22 (A**2) :   -1.94
REMARK      3     B33 (A**2) :   -0.04
REMARK      3     B12 (A**2) :    0.00
REMARK      3     B13 (A**2) :    0.00
REMARK      3     B23 (A**2) :    0.00
REMARK      3
REMARK      3 ESTIMATED OVERALL COORDINATE ERROR.
REMARK      3   ESU BASED ON R VALUE      (A) :   0.355
REMARK      3   ESU BASED ON FREE R VALUE (A) :   0.287
REMARK      3   ESU BASED ON MAXIMUM LIKELIHOOD (A) :   0.293
REMARK      3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2) :  12.484
REMARK      3
REMARK      3 CORRELATION COEFFICIENTS.
REMARK      3   CORRELATION COEFFICIENT FO-FC      :   0.907
REMARK      3   CORRELATION COEFFICIENT FO-FC FREE :   0.862

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Figure 2-2

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REMARK 3
REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES          COUNT      RMS      WEIGHT
REMARK 3 BOND LENGTHS REFINED ATOMS (A): 3439 ; 0.013 ; 0.022
REMARK 3 BOND ANGLES REFINED ATOMS (DEGREES): 4671 ; 1.669 ; 1.953
REMARK 3 TORSION ANGLES, PERIOD 1 (DEGREES): 425 ; 3.956 ; 3.000
REMARK 3 TORSION ANGLES, PERIOD 3 (DEGREES): 605 ; 22.659 ; 15.000
REMARK 3 CHIRAL-CENTER RESTRAINTS (A**3): 527 ; 0.112 ; 0.200
REMARK 3 GENERAL PLANES REFINED ATOMS (A): 2625 ; 0.005 ; 0.020
REMARK 3 NON-BONDED CONTACTS REFINED ATOMS (A): 1755 ; 0.299 ; 0.300
REMARK 3 H-BOND (X...Y) REFINED ATOMS (A): 288 ; 0.228 ; 0.500
REMARK 3 SYMMETRY VDW REFINED ATOMS (A): 26 ; 0.359 ; 0.300
REMARK 3 SYMMETRY H-BOND REFINED ATOMS (A): 1 ; 1.302 ; 0.500
REMARK 3
REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS.          COUNT      RMS      WEIGHT
REMARK 3 MAIN-CHAIN BOND REFINED ATOMS (A**2): 2138 ; 0.973 ; 1.500
REMARK 3 MAIN-CHAIN ANGLE REFINED ATOMS (A**2): 3428 ; 1.768 ; 2.000
REMARK 3 SIDE-CHAIN BOND REFINED ATOMS (A**2): 1301 ; 2.129 ; 3.000
REMARK 3 SIDE-CHAIN ANGLE REFINED ATOMS (A**2): 1243 ; 3.492 ; 4.500
REMARK 3
REMARK 3 NCS RESTRAINTS STATISTICS
REMARK 3 NUMBER OF NCS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 TLS DETAILS
REMARK 3 NUMBER OF TLS GROUPS : NULL
REMARK 3
REMARK 3
REMARK 3 BULK SOLVENT MODELLING.
REMARK 3 METHOD USED : BABINET MODEL WITH MASK
REMARK 3 PARAMETERS FOR MASK CALCULATION
REMARK 3 VDW PROBE RADIUS : 1.40
REMARK 3 ION PROBE RADIUS : 0.80
REMARK 3 SHRINKAGE RADIUS : 0.80
REMARK 3
REMARK 3 OTHER REFINEMENT REMARKS: NULL
REMARK 3
CRYST1 59.990 118.200 178.930 90.00 90.00 90.00 I 21 21 21
SCALE1 0.016669 0.000000 0.000000 0.000000
SCALE2 0.000000 0.008460 0.000000 0.000000
SCALE3 0.000000 0.000000 0.005589 0.000000
ATOM 1 N VAL A 19 -7.418 68.919 31.717 1.00 48.16 N
ATOM 2 CA VAL A 19 -6.779 69.329 30.435 1.00 48.56 C
ATOM 3 CB VAL A 19 -7.111 70.775 30.063 1.00 48.92 C
ATOM 4 CG1 VAL A 19 -6.503 71.122 28.736 1.00 48.03 C
ATOM 5 CG2 VAL A 19 -8.639 70.983 30.013 1.00 50.58 C
ATOM 6 C VAL A 19 -5.257 69.192 30.464 1.00 48.35 C
ATOM 7 O VAL A 19 -4.575 69.963 31.144 1.00 49.46 O
ATOM 8 N PRO A 20 -4.723 68.224 29.724 1.00 47.10 N
ATOM 9 CA PRO A 20 -3.281 68.065 29.628 1.00 46.36 C
ATOM 10 CB PRO A 20 -3.112 66.910 28.656 1.00 46.36 C
ATOM 11 CG PRO A 20 -4.406 66.230 28.628 1.00 47.65 C
ATOM 12 CD PRO A 20 -5.452 67.249 28.903 1.00 47.38 C
ATOM 13 C PRO A 20 -2.820 69.310 28.957 1.00 45.07 C
ATOM 14 O PRO A 20 -3.490 69.743 28.040 1.00 45.79 O
ATOM 15 N ALA A 21 -1.706 69.869 29.381 1.00 43.33 N
ATOM 16 CA ALA A 21 -1.223 71.105 28.805 1.00 41.51 C
ATOM 17 CB ALA A 21 -0.286 71.781 29.787 1.00 41.50 C

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Figure 2-3

ATOM	18	C	ALA	A	21	-0.549	70.968	27.458	1.00	40.90	C
ATOM	19	O	ALA	A	21	-0.686	71.835	26.598	1.00	41.19	O
ATOM	20	N	HIS	A	22	0.220	69.897	27.275	1.00	39.95	N
ATOM	21	CA	HIS	A	22	1.006	69.696	26.050	1.00	38.49	C
ATOM	22	CB	HIS	A	22	2.507	69.744	26.398	1.00	38.83	C
ATOM	23	CG	HIS	A	22	3.428	69.616	25.224	1.00	36.59	C
ATOM	24	ND1	HIS	A	22	4.754	69.973	25.291	1.00	32.53	N
ATOM	25	CE1	HIS	A	22	5.324	69.783	24.116	1.00	32.54	C
ATOM	26	NE2	HIS	A	22	4.415	69.302	23.288	1.00	32.54	N
ATOM	27	CD2	HIS	A	22	3.220	69.181	23.958	1.00	34.01	C
ATOM	28	C	HIS	A	22	0.590	68.330	25.533	1.00	38.14	C
ATOM	29	O	HIS	A	22	0.698	67.349	26.250	1.00	38.19	O
ATOM	30	N	ILE	A	23	0.032	68.261	24.325	1.00	37.48	N
ATOM	31	CA	ILE	A	23	-0.470	66.987	23.832	1.00	36.43	C
ATOM	32	CB	ILE	A	23	-1.959	67.025	23.578	1.00	36.22	C
ATOM	33	CG1	ILE	A	23	-2.714	67.041	24.892	1.00	37.55	C
ATOM	34	CD1	ILE	A	23	-4.245	66.887	24.716	1.00	38.62	C
ATOM	35	CG2	ILE	A	23	-2.365	65.826	22.824	1.00	34.78	C
ATOM	36	C	ILE	A	23	0.252	66.646	22.565	1.00	36.13	C
ATOM	37	O	ILE	A	23	0.306	67.472	21.672	1.00	34.91	O
ATOM	38	N	GLY	A	24	0.855	65.445	22.524	1.00	35.65	N
ATOM	39	CA	GLY	A	24	1.648	65.032	21.382	1.00	35.69	C
ATOM	40	C	GLY	A	24	0.781	64.246	20.441	1.00	35.73	C
ATOM	41	O	GLY	A	24	-0.025	63.444	20.885	1.00	36.40	O
ATOM	42	N	ILE	A	25	0.920	64.487	19.144	1.00	36.62	N
ATOM	43	CA	ILE	A	25	0.059	63.807	18.196	1.00	37.63	C
ATOM	44	CB	ILE	A	25	-1.026	64.771	17.646	1.00	38.53	C
ATOM	45	CG1	ILE	A	25	-1.614	65.642	18.763	1.00	39.49	C
ATOM	46	CD1	ILE	A	25	-2.740	66.564	18.299	1.00	43.97	C
ATOM	47	CG2	ILE	A	25	-2.108	63.956	16.962	1.00	37.61	C
ATOM	48	C	ILE	A	25	0.732	63.122	17.008	1.00	37.06	C
ATOM	49	O	ILE	A	25	1.339	63.771	16.182	1.00	36.59	O
ATOM	50	N	ILE	A	26	0.578	61.812	16.889	1.00	37.50	N
ATOM	51	CA	ILE	A	26	1.092	61.167	15.655	1.00	38.85	C
ATOM	52	CB	ILE	A	26	1.793	59.863	16.008	1.00	37.61	C
ATOM	53	CG1	ILE	A	26	2.987	60.196	16.901	1.00	38.29	C
ATOM	54	CD1	ILE	A	26	3.478	59.043	17.730	1.00	38.15	C
ATOM	55	CG2	ILE	A	26	2.300	59.189	14.794	1.00	37.43	C
ATOM	56	C	ILE	A	26	0.042	61.000	14.542	1.00	39.31	C
ATOM	57	O	ILE	A	26	-0.760	60.072	14.555	1.00	38.98	O
ATOM	58	N	MET	A	27	0.041	61.926	13.601	1.00	42.96	N
ATOM	59	CA	MET	A	27	-0.934	61.880	12.512	1.00	46.32	C
ATOM	60	CB	MET	A	27	-1.016	63.232	11.826	1.00	47.00	C
ATOM	61	CG	MET	A	27	-1.560	64.258	12.770	1.00	47.41	C
ATOM	62	SD	MET	A	27	-1.531	65.830	12.037	1.00	52.60	S
ATOM	63	CE	MET	A	27	0.225	66.138	11.726	1.00	48.74	C
ATOM	64	C	MET	A	27	-0.734	60.736	11.519	1.00	48.03	C
ATOM	65	O	MET	A	27	0.043	60.832	10.566	1.00	48.14	O
ATOM	66	N	ASP	A	28	-1.474	59.660	11.744	1.00	49.90	N
ATOM	67	CA	ASP	A	28	-1.361	58.497	10.892	1.00	52.11	C
ATOM	68	CB	ASP	A	28	-0.709	57.378	11.699	1.00	52.75	C
ATOM	69	CG	ASP	A	28	0.006	56.368	10.826	1.00	54.15	C
ATOM	70	OD1	ASP	A	28	0.535	56.770	9.761	1.00	55.29	O
ATOM	71	OD2	ASP	A	28	0.087	55.157	11.127	1.00	55.05	O
ATOM	72	C	ASP	A	28	-2.705	58.004	10.328	1.00	53.35	C
ATOM	73	O	ASP	A	28	-3.728	58.005	11.021	1.00	51.99	O
ATOM	74	N	GLY	A	29	-2.700	57.587	9.064	1.00	54.97	N

Figure 2-4

ATOM	75	CA	GLY	A	29	-3.892	56.975	8.498	1.00	57.53	C
ATOM	76	C	GLY	A	29	-4.574	57.512	7.246	1.00	58.92	C
ATOM	77	O	GLY	A	29	-5.447	56.852	6.707	1.00	58.79	O
ATOM	78	N	ASN	A	30	-4.212	58.696	6.791	1.00	60.57	N
ATOM	79	CA	ASN	A	30	-4.795	59.241	5.570	1.00	62.89	C
ATOM	80	CB	ASN	A	30	-3.907	60.387	5.092	1.00	62.41	C
ATOM	81	CG	ASN	A	30	-3.426	61.254	6.259	1.00	62.16	C
ATOM	82	OD1	ASN	A	30	-3.928	61.131	7.379	1.00	60.87	O
ATOM	83	ND2	ASN	A	30	-2.453	62.118	6.004	1.00	60.20	N
ATOM	84	C	ASN	A	30	-5.010	58.175	4.484	1.00	64.79	C
ATOM	85	O	ASN	A	30	-6.122	58.029	3.938	1.00	64.47	O
ATOM	86	N	GLY	A	31	-3.945	57.423	4.199	1.00	66.96	N
ATOM	87	CA	GLY	A	31	-3.982	56.359	3.217	1.00	69.13	C
ATOM	88	C	GLY	A	31	-5.072	55.359	3.511	1.00	70.89	C
ATOM	89	O	GLY	A	31	-6.083	55.311	2.813	1.00	70.89	O
ATOM	90	N	ARG	A	32	-4.894	54.559	4.550	1.00	72.88	N
ATOM	91	CA	ARG	A	32	-5.895	53.536	4.839	1.00	75.53	C
ATOM	92	CB	ARG	A	32	-5.701	52.939	6.232	1.00	75.54	C
ATOM	93	CG	ARG	A	32	-4.885	51.662	6.238	1.00	77.42	C
ATOM	94	CD	ARG	A	32	-4.618	51.092	7.622	1.00	80.39	C
ATOM	95	NE	ARG	A	32	-4.006	49.767	7.546	1.00	83.46	N
ATOM	96	CZ	ARG	A	32	-4.613	48.678	7.069	1.00	86.03	C
ATOM	97	NH1	ARG	A	32	-3.955	47.522	7.042	1.00	86.88	N
ATOM	98	NH2	ARG	A	32	-5.874	48.734	6.622	1.00	86.02	N
ATOM	99	C	ARG	A	32	-7.314	54.080	4.686	1.00	76.93	C
ATOM	100	O	ARG	A	32	-8.242	53.356	4.331	1.00	76.95	O
ATOM	101	N	TRP	A	33	-7.460	55.373	4.934	1.00	78.77	N
ATOM	102	CA	TRP	A	33	-8.760	56.016	4.934	1.00	80.73	C
ATOM	103	CB	TRP	A	33	-8.678	57.307	5.759	1.00	80.86	C
ATOM	104	CG	TRP	A	33	-9.982	57.931	6.089	1.00	81.96	C
ATOM	105	CD1	TRP	A	33	-10.871	57.557	7.059	1.00	82.34	C
ATOM	106	NE1	TRP	A	33	-11.954	58.405	7.058	1.00	82.62	N
ATOM	107	CE2	TRP	A	33	-11.776	59.342	6.071	1.00	83.40	C
ATOM	108	CD2	TRP	A	33	-10.541	59.071	5.456	1.00	83.01	C
ATOM	109	CE3	TRP	A	33	-10.122	59.896	4.417	1.00	84.03	C
ATOM	110	CZ3	TRP	A	33	-10.928	60.938	4.023	1.00	84.27	C
ATOM	111	CH2	TRP	A	33	-12.147	61.187	4.647	1.00	83.63	C
ATOM	112	CZ2	TRP	A	33	-12.594	60.401	5.668	1.00	83.15	C
ATOM	113	C	TRP	A	33	-9.298	56.252	3.513	1.00	81.59	C
ATOM	114	O	TRP	A	33	-10.429	55.859	3.199	1.00	81.27	O
ATOM	115	N	ALA	A	34	-8.481	56.868	2.663	1.00	82.68	N
ATOM	116	CA	ALA	A	34	-8.861	57.108	1.275	1.00	84.09	C
ATOM	117	CB	ALA	A	34	-7.763	57.847	0.551	1.00	83.71	C
ATOM	118	C	ALA	A	34	-9.178	55.802	0.552	1.00	85.25	C
ATOM	119	O	ALA	A	34	-10.277	55.606	0.038	1.00	85.18	O
ATOM	120	N	LYS	A	35	-8.195	54.916	0.521	1.00	86.87	N
ATOM	121	CA	LYS	A	35	-8.331	53.640	-0.152	1.00	88.59	C
ATOM	122	CB	LYS	A	35	-7.111	52.770	0.101	1.00	88.50	C
ATOM	123	CG	LYS	A	35	-7.256	51.348	-0.401	1.00	89.35	C
ATOM	124	CD	LYS	A	35	-5.885	50.726	-0.624	1.00	91.12	C
ATOM	125	CE	LYS	A	35	-5.024	51.620	-1.518	1.00	91.32	C
ATOM	126	NZ	LYS	A	35	-3.592	51.206	-1.556	1.00	91.42	N
ATOM	127	C	LYS	A	35	-9.577	52.913	0.304	1.00	89.49	C
ATOM	128	O	LYS	A	35	-10.267	52.300	-0.503	1.00	89.53	O
ATOM	129	N	LYS	A	36	-9.856	52.979	1.602	1.00	90.82	N
ATOM	130	CA	LYS	A	36	-11.059	52.377	2.170	1.00	91.97	C
ATOM	131	CB	LYS	A	36	-11.037	52.478	3.696	1.00	92.24	C

Figure 2-5

ATOM	132	CG	LYS	A	36	-11.936	51.500	4.432	1.00	92.98	C
ATOM	133	CD	LYS	A	36	-11.954	51.799	5.931	1.00	94.21	C
ATOM	134	CE	LYS	A	36	-13.100	51.072	6.625	1.00	95.59	C
ATOM	135	NZ	LYS	A	36	-13.270	51.496	8.041	1.00	96.83	N
ATOM	136	C	LYS	A	36	-12.240	53.147	1.602	1.00	92.50	C
ATOM	137	O	LYS	A	36	-13.307	52.587	1.336	1.00	92.34	O
ATOM	138	N	ARG	A	37	-12.037	54.446	1.411	1.00	93.24	N
ATOM	139	CA	ARG	A	37	-13.058	55.267	0.797	1.00	94.00	C
ATOM	140	CB	ARG	A	37	-12.939	56.727	1.222	1.00	93.87	C
ATOM	141	CG	ARG	A	37	-13.950	57.089	2.279	1.00	93.38	C
ATOM	142	CD	ARG	A	37	-13.386	57.737	3.515	1.00	92.65	C
ATOM	143	NE	ARG	A	37	-14.327	57.647	4.631	1.00	92.34	N
ATOM	144	CZ	ARG	A	37	-14.180	56.845	5.682	1.00	92.82	C
ATOM	145	NH1	ARG	A	37	-13.123	56.050	5.779	1.00	93.20	N
ATOM	146	NH2	ARG	A	37	-15.086	56.840	6.649	1.00	92.84	N
ATOM	147	C	ARG	A	37	-12.951	55.081	-0.696	1.00	94.88	C
ATOM	148	O	ARG	A	37	-13.859	55.424	-1.439	1.00	94.72	O
ATOM	149	N	MET	A	38	-11.833	54.513	-1.131	1.00	96.29	N
ATOM	150	CA	MET	A	38	-11.673	54.146	-2.532	1.00	97.29	C
ATOM	151	CB	MET	A	38	-12.908	53.368	-2.963	1.00	97.56	C
ATOM	152	CG	MET	A	38	-13.329	53.464	-4.381	1.00	98.17	C
ATOM	153	SD	MET	A	38	-14.860	52.595	-4.310	1.00	101.09	S
ATOM	154	CE	MET	A	38	-14.386	51.142	-3.317	1.00	100.77	C
ATOM	155	C	MET	A	38	-11.398	55.346	-3.413	1.00	97.68	C
ATOM	156	O	MET	A	38	-11.799	55.422	-4.572	1.00	97.34	O
ATOM	157	N	GLN	A	39	-10.686	56.285	-2.821	1.00	98.53	N
ATOM	158	CA	GLN	A	39	-10.292	57.487	-3.499	1.00	99.58	C
ATOM	159	CB	GLN	A	39	-10.769	58.690	-2.698	1.00	99.64	C
ATOM	160	CG	GLN	A	39	-12.283	58.751	-2.574	1.00	99.57	C
ATOM	161	CD	GLN	A	39	-12.941	59.073	-3.896	1.00	100.24	C
ATOM	162	OE1	GLN	A	39	-12.269	59.157	-4.923	1.00	100.05	O
ATOM	163	NE2	GLN	A	39	-14.249	59.267	-3.879	1.00	101.01	N
ATOM	164	C	GLN	A	39	-8.780	57.448	-3.612	1.00	100.37	C
ATOM	165	O	GLN	A	39	-8.132	56.603	-2.997	1.00	100.68	O
ATOM	166	N	PRO	A	40	-8.218	58.351	-4.401	1.00	101.06	N
ATOM	167	CA	PRO	A	40	-6.771	58.404	-4.617	1.00	101.48	C
ATOM	168	CB	PRO	A	40	-6.610	59.651	-5.480	1.00	101.56	C
ATOM	169	CG	PRO	A	40	-7.834	60.446	-5.158	1.00	101.63	C
ATOM	170	CD	PRO	A	40	-8.920	59.416	-5.132	1.00	101.26	C
ATOM	171	C	PRO	A	40	-6.098	58.642	-3.290	1.00	101.91	C
ATOM	172	O	PRO	A	40	-6.803	58.981	-2.341	1.00	102.13	O
ATOM	173	N	ARG	A	41	-4.780	58.497	-3.211	1.00	102.35	N
ATOM	174	CA	ARG	A	41	-4.099	58.702	-1.939	1.00	102.62	C
ATOM	175	CB	ARG	A	41	-2.703	58.077	-1.941	1.00	102.88	C
ATOM	176	CG	ARG	A	41	-2.063	58.026	-0.565	1.00	103.36	C
ATOM	177	CD	ARG	A	41	-0.879	57.084	-0.447	1.00	104.27	C
ATOM	178	NE	ARG	A	41	-0.454	56.962	0.943	1.00	104.82	N
ATOM	179	CZ	ARG	A	41	0.534	57.662	1.483	1.00	105.07	C
ATOM	180	NH1	ARG	A	41	1.212	58.530	0.744	1.00	105.26	N
ATOM	181	NH2	ARG	A	41	0.849	57.494	2.761	1.00	104.63	N
ATOM	182	C	ARG	A	41	-4.034	60.162	-1.519	1.00	102.53	C
ATOM	183	O	ARG	A	41	-4.181	60.463	-0.338	1.00	102.62	O
ATOM	184	N	VAL	A	42	-3.830	61.068	-2.473	1.00	102.39	N
ATOM	185	CA	VAL	A	42	-3.733	62.498	-2.150	1.00	102.37	C
ATOM	186	CB	VAL	A	42	-3.343	63.348	-3.380	1.00	102.45	C
ATOM	187	CG1	VAL	A	42	-4.460	63.348	-4.415	1.00	102.73	C
ATOM	188	CG2	VAL	A	42	-2.981	64.767	-2.958	1.00	102.52	C

Figure 2-6

ATOM	189	C	VAL	A	42	-5.004	63.055	-1.481	1.00102.11	C
ATOM	190	O	VAL	A	42	-4.974	64.106	-0.835	1.00102.06	O
ATOM	191	N	PHE	A	43	-6.113	62.339	-1.644	1.00101.71	N
ATOM	192	CA	PHE	A	43	-7.368	62.669	-0.979	1.00101.27	C
ATOM	193	CB	PHE	A	43	-8.435	61.650	-1.381	1.00101.51	C
ATOM	194	CG	PHE	A	43	-9.791	62.239	-1.668	1.00102.18	C
ATOM	195	CD1	PHE	A	43	-9.989	63.044	-2.778	1.00103.21	C
ATOM	196	CE1	PHE	A	43	-11.234	63.562	-3.059	1.00103.53	C
ATOM	197	CZ	PHE	A	43	-12.304	63.268	-2.234	1.00103.60	C
ATOM	198	CE2	PHE	A	43	-12.127	62.455	-1.132	1.00102.56	C
ATOM	199	CD2	PHE	A	43	-10.879	61.940	-0.858	1.00102.55	C
ATOM	200	C	PHE	A	43	-7.122	62.539	0.520	1.00100.54	C
ATOM	201	O	PHE	A	43	-7.730	63.228	1.329	1.00100.77	O
ATOM	202	N	GLY	A	44	-6.234	61.622	0.884	1.00 99.52	N
ATOM	203	CA	GLY	A	44	-5.900	61.394	2.275	1.00 97.99	C
ATOM	204	C	GLY	A	44	-5.234	62.589	2.928	1.00 96.82	C
ATOM	205	O	GLY	A	44	-5.690	63.069	3.961	1.00 96.61	O
ATOM	206	N	HIS	A	45	-4.158	63.086	2.327	1.00 95.65	N
ATOM	207	CA	HIS	A	45	-3.456	64.206	2.911	1.00 94.58	C
ATOM	208	CB	HIS	A	45	-2.292	64.654	2.030	1.00 95.01	C
ATOM	209	CG	HIS	A	45	-1.130	63.711	2.046	1.00 97.01	C
ATOM	210	ND1	HIS	A	45	-1.213	62.437	2.569	1.00 98.89	N
ATOM	211	CE1	HIS	A	45	-0.045	61.834	2.443	1.00 99.47	C
ATOM	212	NE2	HIS	A	45	0.792	62.670	1.857	1.00 99.52	N
ATOM	213	CD2	HIS	A	45	0.141	63.853	1.601	1.00 98.78	C
ATOM	214	C	HIS	A	45	-4.457	65.319	3.098	1.00 93.30	C
ATOM	215	O	HIS	A	45	-4.514	65.946	4.148	1.00 93.25	O
ATOM	216	N	LYS	A	46	-5.279	65.536	2.083	1.00 91.70	N
ATOM	217	CA	LYS	A	46	-6.273	66.594	2.146	1.00 90.09	C
ATOM	218	CB	LYS	A	46	-7.113	66.605	0.871	1.00 90.45	C
ATOM	219	CG	LYS	A	46	-6.415	67.243	-0.315	1.00 91.82	C
ATOM	220	CD	LYS	A	46	-7.393	67.429	-1.463	1.00 94.36	C
ATOM	221	CE	LYS	A	46	-6.966	68.552	-2.394	1.00 95.41	C
ATOM	222	NZ	LYS	A	46	-8.149	69.175	-3.055	1.00 95.69	N
ATOM	223	C	LYS	A	46	-7.181	66.498	3.372	1.00 88.34	C
ATOM	224	O	LYS	A	46	-7.293	67.442	4.145	1.00 87.84	O
ATOM	225	N	ALA	A	47	-7.815	65.344	3.540	1.00 86.35	N
ATOM	226	CA	ALA	A	47	-8.778	65.128	4.612	1.00 84.67	C
ATOM	227	CB	ALA	A	47	-9.488	63.794	4.418	1.00 84.81	C
ATOM	228	C	ALA	A	47	-8.198	65.208	6.019	1.00 83.51	C
ATOM	229	O	ALA	A	47	-8.923	65.462	6.982	1.00 83.28	O
ATOM	230	N	GLY	A	48	-6.898	64.985	6.144	1.00 81.98	N
ATOM	231	CA	GLY	A	48	-6.271	65.016	7.448	1.00 79.87	C
ATOM	232	C	GLY	A	48	-5.703	66.380	7.758	1.00 78.18	C
ATOM	233	O	GLY	A	48	-5.739	66.845	8.896	1.00 77.76	O
ATOM	234	N	MET	A	49	-5.182	67.027	6.727	1.00 76.60	N
ATOM	235	CA	MET	A	49	-4.537	68.311	6.900	1.00 75.08	C
ATOM	236	CB	MET	A	49	-3.672	68.640	5.696	1.00 75.38	C
ATOM	237	CG	MET	A	49	-2.742	69.803	5.906	1.00 75.39	C
ATOM	238	SD	MET	A	49	-3.536	71.242	5.264	1.00 74.34	S
ATOM	239	CE	MET	A	49	-4.234	70.574	3.734	1.00 75.11	C
ATOM	240	C	MET	A	49	-5.573	69.386	7.193	1.00 73.99	C
ATOM	241	O	MET	A	49	-5.240	70.537	7.492	1.00 73.76	O
ATOM	242	N	ALA	A	50	-6.838	68.992	7.109	1.00 72.28	N
ATOM	243	CA	ALA	A	50	-7.912	69.846	7.577	1.00 70.35	C
ATOM	244	CB	ALA	A	50	-9.180	69.652	6.758	1.00 70.70	C
ATOM	245	C	ALA	A	50	-8.128	69.361	8.981	1.00 68.78	C

Figure 2-7

ATOM	246	O	ALA	A	50	-7.813	70.068	9.933	1.00	68.26	O
ATOM	247	N	ALA	A	51	-8.634	68.127	9.084	1.00	67.23	N
ATOM	248	CA	ALA	A	51	-8.947	67.459	10.364	1.00	65.66	C
ATOM	249	CB	ALA	A	51	-8.905	65.940	10.226	1.00	65.82	C
ATOM	250	C	ALA	A	51	-8.038	67.903	11.488	1.00	64.12	C
ATOM	251	O	ALA	A	51	-8.343	67.696	12.665	1.00	63.67	O
ATOM	252	N	LEU	A	52	-6.923	68.509	11.102	1.00	62.23	N
ATOM	253	CA	LEU	A	52	-6.018	69.091	12.042	1.00	60.93	C
ATOM	254	CB	LEU	A	52	-4.768	69.614	11.318	1.00	60.68	C
ATOM	255	CG	LEU	A	52	-3.424	69.602	12.065	1.00	59.93	C
ATOM	256	CD1	LEU	A	52	-2.450	70.614	11.509	1.00	59.18	C
ATOM	257	CD2	LEU	A	52	-3.611	69.833	13.541	1.00	59.72	C
ATOM	258	C	LEU	A	52	-6.804	70.244	12.643	1.00	60.45	C
ATOM	259	O	LEU	A	52	-6.841	70.423	13.865	1.00	60.21	O
ATOM	260	N	GLN	A	53	-7.468	71.007	11.776	1.00	60.13	N
ATOM	261	CA	GLN	A	53	-8.184	72.212	12.216	1.00	59.47	C
ATOM	262	CB	GLN	A	53	-8.689	73.052	11.034	1.00	60.10	C
ATOM	263	CG	GLN	A	53	-7.554	73.762	10.275	1.00	60.42	C
ATOM	264	CD	GLN	A	53	-7.489	75.252	10.521	1.00	62.07	C
ATOM	265	OE1	GLN	A	53	-8.507	75.890	10.810	1.00	62.73	O
ATOM	266	NE2	GLN	A	53	-6.295	75.823	10.377	1.00	62.14	N
ATOM	267	C	GLN	A	53	-9.268	71.933	13.237	1.00	58.53	C
ATOM	268	O	GLN	A	53	-9.250	72.511	14.327	1.00	58.68	O
ATOM	269	N	THR	A	54	-10.197	71.042	12.927	1.00	57.53	N
ATOM	270	CA	THR	A	54	-11.194	70.745	13.940	1.00	57.13	C
ATOM	271	CB	THR	A	54	-12.283	69.722	13.471	1.00	57.31	C
ATOM	272	OG1	THR	A	54	-12.356	68.609	14.381	1.00	59.36	O
ATOM	273	CG2	THR	A	54	-11.918	69.093	12.148	1.00	57.78	C
ATOM	274	C	THR	A	54	-10.497	70.329	15.227	1.00	56.29	C
ATOM	275	O	THR	A	54	-10.926	70.715	16.314	1.00	56.09	O
ATOM	276	N	VAL	A	55	-9.400	69.580	15.114	1.00	55.11	N
ATOM	277	CA	VAL	A	55	-8.679	69.153	16.317	1.00	53.86	C
ATOM	278	CB	VAL	A	55	-7.590	68.121	16.022	1.00	53.84	C
ATOM	279	CG1	VAL	A	55	-6.506	68.169	17.107	1.00	53.20	C
ATOM	280	CG2	VAL	A	55	-8.209	66.739	15.932	1.00	54.78	C
ATOM	281	C	VAL	A	55	-8.018	70.300	17.043	1.00	52.77	C
ATOM	282	O	VAL	A	55	-8.159	70.456	18.261	1.00	52.24	O
ATOM	283	N	THR	A	56	-7.269	71.087	16.297	1.00	51.44	N
ATOM	284	CA	THR	A	56	-6.584	72.179	16.903	1.00	51.10	C
ATOM	285	CB	THR	A	56	-5.872	72.966	15.806	1.00	51.35	C
ATOM	286	OG1	THR	A	56	-5.395	72.056	14.814	1.00	49.29	O
ATOM	287	CG2	THR	A	56	-4.631	73.655	16.322	1.00	50.86	C
ATOM	288	C	THR	A	56	-7.679	73.010	17.569	1.00	51.96	C
ATOM	289	O	THR	A	56	-7.665	73.218	18.795	1.00	51.67	O
ATOM	290	N	LYS	A	57	-8.655	73.447	16.769	1.00	52.29	N
ATOM	291	CA	LYS	A	57	-9.740	74.275	17.297	1.00	53.47	C
ATOM	292	CB	LYS	A	57	-10.889	74.460	16.281	1.00	53.91	C
ATOM	293	CG	LYS	A	57	-10.672	75.629	15.303	1.00	55.41	C
ATOM	294	CD	LYS	A	57	-11.300	75.364	13.893	1.00	61.36	C
ATOM	295	CE	LYS	A	57	-12.825	75.655	13.801	1.00	62.12	C
ATOM	296	NZ	LYS	A	57	-13.651	74.451	13.472	1.00	64.22	N
ATOM	297	C	LYS	A	57	-10.276	73.730	18.596	1.00	53.59	C
ATOM	298	O	LYS	A	57	-10.300	74.444	19.600	1.00	54.01	O
ATOM	299	N	ALA	A	58	-10.685	72.466	18.603	1.00	53.10	N
ATOM	300	CA	ALA	A	58	-11.234	71.921	19.827	1.00	54.08	C
ATOM	301	CB	ALA	A	58	-11.993	70.615	19.563	1.00	54.48	C
ATOM	302	C	ALA	A	58	-10.180	71.757	20.933	1.00	54.71	C

Figure 2-8

ATOM	303	O	ALA	A	58	-10.521	71.677	22.128	1.00	54.58	O
ATOM	304	N	ALA	A	59	-8.902	71.726	20.541	1.00	55.02	N
ATOM	305	CA	ALA	A	59	-7.821	71.613	21.519	1.00	54.53	C
ATOM	306	CB	ALA	A	59	-6.498	71.372	20.845	1.00	54.33	C
ATOM	307	C	ALA	A	59	-7.790	72.932	22.241	1.00	54.31	C
ATOM	308	O	ALA	A	59	-7.709	72.985	23.478	1.00	53.65	O
ATOM	309	N	ASN	A	60	-7.889	74.006	21.463	1.00	54.16	N
ATOM	310	CA	ASN	A	60	-7.831	75.335	22.059	1.00	53.77	C
ATOM	311	CB	ASN	A	60	-7.544	76.399	21.017	1.00	53.02	C
ATOM	312	CG	ASN	A	60	-7.174	77.704	21.649	1.00	52.46	C
ATOM	313	OD1	ASN	A	60	-7.226	77.838	22.876	1.00	47.05	O
ATOM	314	ND2	ASN	A	60	-6.769	78.675	20.833	1.00	53.35	N
ATOM	315	C	ASN	A	60	-9.107	75.678	22.839	1.00	54.01	C
ATOM	316	O	ASN	A	60	-9.084	76.352	23.871	1.00	53.99	O
ATOM	317	N	LYS	A	61	-10.231	75.195	22.349	1.00	54.65	N
ATOM	318	CA	LYS	A	61	-11.489	75.495	23.016	1.00	54.97	C
ATOM	319	CB	LYS	A	61	-12.652	74.886	22.249	1.00	55.25	C
ATOM	320	CG	LYS	A	61	-14.015	75.374	22.676	1.00	57.85	C
ATOM	321	CD	LYS	A	61	-15.078	74.915	21.654	1.00	60.48	C
ATOM	322	CE	LYS	A	61	-15.233	73.387	21.630	1.00	60.44	C
ATOM	323	NZ	LYS	A	61	-15.859	72.903	20.365	1.00	60.53	N
ATOM	324	C	LYS	A	61	-11.442	74.929	24.418	1.00	54.43	C
ATOM	325	O	LYS	A	61	-11.883	75.579	25.371	1.00	54.29	O
ATOM	326	N	LEU	A	62	-10.870	73.727	24.535	1.00	53.43	N
ATOM	327	CA	LEU	A	62	-10.784	73.022	25.813	1.00	52.54	C
ATOM	328	CB	LEU	A	62	-10.619	71.520	25.571	1.00	52.90	C
ATOM	329	CG	LEU	A	62	-11.852	70.696	25.149	1.00	54.10	C
ATOM	330	CD1	LEU	A	62	-12.881	71.495	24.333	1.00	54.92	C
ATOM	331	CD2	LEU	A	62	-11.452	69.424	24.412	1.00	52.66	C
ATOM	332	C	LEU	A	62	-9.687	73.515	26.766	1.00	51.60	C
ATOM	333	O	LEU	A	62	-9.613	73.050	27.893	1.00	52.01	O
ATOM	334	N	GLY	A	63	-8.853	74.454	26.327	1.00	49.71	N
ATOM	335	CA	GLY	A	63	-7.751	74.926	27.143	1.00	48.39	C
ATOM	336	C	GLY	A	63	-6.415	74.158	27.116	1.00	47.53	C
ATOM	337	O	GLY	A	63	-5.857	73.930	28.168	1.00	47.49	O
ATOM	338	N	VAL	A	64	-5.885	73.784	25.948	1.00	46.60	N
ATOM	339	CA	VAL	A	64	-4.610	73.080	25.872	1.00	45.98	C
ATOM	340	CB	VAL	A	64	-4.606	72.074	24.705	1.00	46.22	C
ATOM	341	CG1	VAL	A	64	-3.175	71.781	24.240	1.00	45.29	C
ATOM	342	CG2	VAL	A	64	-5.361	70.804	25.068	1.00	45.46	C
ATOM	343	C	VAL	A	64	-3.541	74.105	25.608	1.00	45.82	C
ATOM	344	O	VAL	A	64	-3.790	75.034	24.899	1.00	46.92	O
ATOM	345	N	LYS	A	65	-2.345	73.981	26.141	1.00	45.52	N
ATOM	346	CA	LYS	A	65	-1.347	75.007	25.824	1.00	45.67	C
ATOM	347	CB	LYS	A	65	-0.442	75.276	27.016	1.00	46.38	C
ATOM	348	CG	LYS	A	65	-1.127	75.801	28.266	1.00	49.62	C
ATOM	349	CD	LYS	A	65	-0.049	76.420	29.172	1.00	55.66	C
ATOM	350	CE	LYS	A	65	-0.561	77.611	30.012	1.00	58.41	C
ATOM	351	NZ	LYS	A	65	0.477	78.011	31.028	1.00	59.73	N
ATOM	352	C	LYS	A	65	-0.471	74.662	24.622	1.00	45.73	C
ATOM	353	O	LYS	A	65	0.119	75.545	23.955	1.00	44.67	O
ATOM	354	N	VAL	A	66	-0.321	73.366	24.377	1.00	45.29	N
ATOM	355	CA	VAL	A	66	0.470	72.949	23.251	1.00	44.99	C
ATOM	356	CB	VAL	A	66	1.957	72.810	23.610	1.00	45.40	C
ATOM	357	CG1	VAL	A	66	2.739	72.280	22.421	1.00	44.89	C
ATOM	358	CG2	VAL	A	66	2.548	74.132	24.092	1.00	44.68	C
ATOM	359	C	VAL	A	66	0.009	71.616	22.695	1.00	45.42	C

Figure 2-9

ATOM	360	O	VAL	A	66	-0.255	70.668	23.431	1.00	45.13	O
ATOM	361	N	ILE	A	67	-0.142	71.583	21.381	1.00	45.54	N
ATOM	362	CA	ILE	A	67	-0.277	70.340	20.669	1.00	45.44	C
ATOM	363	CB	ILE	A	67	-1.506	70.371	19.821	1.00	46.11	C
ATOM	364	CG1	ILE	A	67	-1.449	71.596	18.914	1.00	48.34	C
ATOM	365	CD1	ILE	A	67	-1.971	71.346	17.526	1.00	51.30	C
ATOM	366	CG2	ILE	A	67	-2.725	70.417	20.718	1.00	47.74	C
ATOM	367	C	ILE	A	67	0.983	70.213	19.793	1.00	44.18	C
ATOM	368	O	ILE	A	67	1.383	71.167	19.096	1.00	43.56	O
ATOM	369	N	THR	A	68	1.664	69.076	19.883	1.00	42.76	N
ATOM	370	CA	THR	A	68	2.792	68.849	18.975	1.00	41.96	C
ATOM	371	CB	THR	A	68	4.095	68.512	19.707	1.00	42.16	C
ATOM	372	OG1	THR	A	68	4.549	69.668	20.414	1.00	42.53	O
ATOM	373	CG2	THR	A	68	5.208	68.276	18.711	1.00	41.94	C
ATOM	374	C	THR	A	68	2.405	67.769	17.969	1.00	41.17	C
ATOM	375	O	THR	A	68	2.124	66.616	18.331	1.00	39.89	O
ATOM	376	N	VAL	A	69	2.358	68.159	16.703	1.00	40.92	N
ATOM	377	CA	VAL	A	69	1.939	67.224	15.674	1.00	41.88	C
ATOM	378	CB	VAL	A	69	0.732	67.764	14.877	1.00	42.23	C
ATOM	379	CG1	VAL	A	69	-0.461	67.993	15.830	1.00	42.14	C
ATOM	380	CG2	VAL	A	69	1.119	69.011	14.142	1.00	41.38	C
ATOM	381	C	VAL	A	69	3.053	66.693	14.754	1.00	41.55	C
ATOM	382	O	VAL	A	69	3.956	67.401	14.347	1.00	40.42	O
ATOM	383	N	TYR	A	70	2.979	65.402	14.482	1.00	42.89	N
ATOM	384	CA	TYR	A	70	4.012	64.703	13.711	1.00	43.28	C
ATOM	385	CB	TYR	A	70	4.549	63.558	14.547	1.00	43.25	C
ATOM	386	CG	TYR	A	70	5.836	62.904	14.083	1.00	42.86	C
ATOM	387	CD1	TYR	A	70	6.105	61.588	14.424	1.00	44.75	C
ATOM	388	CE1	TYR	A	70	7.273	60.978	14.055	1.00	43.61	C
ATOM	389	CZ	TYR	A	70	8.208	61.680	13.350	1.00	44.85	C
ATOM	390	OH	TYR	A	70	9.372	61.050	12.986	1.00	47.71	O
ATOM	391	CE2	TYR	A	70	7.974	62.993	12.992	1.00	43.44	C
ATOM	392	CD2	TYR	A	70	6.789	63.597	13.360	1.00	41.87	C
ATOM	393	C	TYR	A	70	3.380	64.095	12.502	1.00	43.68	C
ATOM	394	O	TYR	A	70	2.583	63.151	12.612	1.00	43.57	O
ATOM	395	N	ALA	A	71	3.729	64.632	11.352	1.00	44.92	N
ATOM	396	CA	ALA	A	71	3.173	64.143	10.109	1.00	46.49	C
ATOM	397	CB	ALA	A	71	2.650	65.298	9.285	1.00	46.85	C
ATOM	398	C	ALA	A	71	4.228	63.364	9.336	1.00	47.08	C
ATOM	399	O	ALA	A	71	4.135	62.137	9.371	1.00	48.16	O
ATOM	400	OXT	ALA	A	71	5.138	63.954	8.727	1.00	46.68	N
ATOM	401	N	PRO	A	91	1.934	72.313	4.204	1.00	107.62	N
ATOM	402	CA	PRO	A	91	2.907	73.411	4.406	1.00	107.60	C
ATOM	403	CB	PRO	A	91	4.210	72.820	3.868	1.00	107.70	C
ATOM	404	CG	PRO	A	91	3.870	71.398	3.481	1.00	107.66	C
ATOM	405	CD	PRO	A	91	2.401	71.369	3.180	1.00	107.68	C
ATOM	406	C	PRO	A	91	2.497	74.601	3.561	1.00	107.60	C
ATOM	407	O	PRO	A	91	2.093	75.631	4.097	1.00	107.78	O
ATOM	408	N	VAL	A	92	2.591	74.456	2.245	1.00	107.41	N
ATOM	409	CA	VAL	A	92	2.185	75.533	1.355	1.00	107.15	C
ATOM	410	CB	VAL	A	92	2.886	75.454	-0.010	1.00	107.27	C
ATOM	411	CG1	VAL	A	92	1.997	76.021	-1.105	1.00	107.31	C
ATOM	412	CG2	VAL	A	92	4.216	76.185	0.041	1.00	107.35	C
ATOM	413	C	VAL	A	92	0.672	75.572	1.169	1.00	106.78	C
ATOM	414	O	VAL	A	92	0.132	76.559	0.705	1.00	106.94	O
ATOM	415	N	GLU	A	93	-0.020	74.498	1.518	1.00	106.32	N
ATOM	416	CA	GLU	A	93	-1.477	74.507	1.445	1.00	105.87	C

Figure 2-10

ATOM	417	CB	GLU	A	93	-2.032	73.235	0.803	1.00106.05	C
ATOM	418	CG	GLU	A	93	-2.560	73.434	-0.613	1.00106.93	C
ATOM	419	CD	GLU	A	93	-3.064	72.146	-1.258	1.00108.23	C
ATOM	420	OE1	GLU	A	93	-2.229	71.357	-1.745	1.00108.62	O
ATOM	421	OE2	GLU	A	93	-4.296	71.919	-1.294	1.00108.68	O
ATOM	422	C	GLU	A	93	-2.021	74.701	2.847	1.00105.26	C
ATOM	423	O	GLU	A	93	-3.230	74.641	3.087	1.00105.17	O
ATOM	424	N	PHE	A	94	-1.106	74.934	3.778	1.00104.24	N
ATOM	425	CA	PHE	A	94	-1.498	75.216	5.139	1.00102.95	C
ATOM	426	CB	PHE	A	94	-0.466	74.696	6.133	1.00102.90	C
ATOM	427	CG	PHE	A	94	-1.037	74.429	7.479	1.00102.15	C
ATOM	428	CD1	PHE	A	94	-0.365	74.802	8.619	1.00101.45	C
ATOM	429	CE1	PHE	A	94	-0.918	74.564	9.848	1.00101.49	C
ATOM	430	CZ	PHE	A	94	-2.155	73.944	9.946	1.00101.13	C
ATOM	431	CE2	PHE	A	94	-2.828	73.576	8.817	1.00100.42	C
ATOM	432	CD2	PHE	A	94	-2.275	73.820	7.595	1.00101.17	C
ATOM	433	C	PHE	A	94	-1.669	76.720	5.271	1.00102.13	C
ATOM	434	O	PHE	A	94	-2.730	77.193	5.668	1.00102.08	O
ATOM	435	N	TYR	A	95	-0.623	77.460	4.913	1.00100.92	N
ATOM	436	CA	TYR	A	95	-0.663	78.913	4.967	1.00100.05	C
ATOM	437	CB	TYR	A	95	0.629	79.527	4.417	1.00100.16	C
ATOM	438	CG	TYR	A	95	0.665	81.038	4.521	1.00100.91	C
ATOM	439	CD1	TYR	A	95	-0.282	81.718	5.272	1.00101.47	C
ATOM	440	CE1	TYR	A	95	-0.266	83.096	5.381	1.00102.03	C
ATOM	441	CZ	TYR	A	95	0.710	83.820	4.740	1.00102.07	C
ATOM	442	OH	TYR	A	95	0.706	85.191	4.875	1.00102.25	O
ATOM	443	CE2	TYR	A	95	1.676	83.174	3.984	1.00102.04	C
ATOM	444	CD2	TYR	A	95	1.649	81.786	3.878	1.00101.86	C
ATOM	445	C	TYR	A	95	-1.865	79.484	4.213	1.00 99.23	C
ATOM	446	O	TYR	A	95	-2.749	80.102	4.809	1.00 99.20	O
ATOM	447	N	ASP	A	96	-1.908	79.268	2.905	1.00 97.78	N
ATOM	448	CA	ASP	A	96	-2.959	79.861	2.092	1.00 96.34	C
ATOM	449	CB	ASP	A	96	-2.628	79.721	0.599	1.00 96.77	C
ATOM	450	CG	ASP	A	96	-2.922	78.329	0.060	1.00 97.51	C
ATOM	451	OD1	ASP	A	96	-4.024	77.806	0.331	1.00 98.05	O
ATOM	452	OD2	ASP	A	96	-2.120	77.686	-0.653	1.00 98.18	O
ATOM	453	C	ASP	A	96	-4.365	79.328	2.388	1.00 94.78	C
ATOM	454	O	ASP	A	96	-5.350	79.947	1.993	1.00 94.97	O
ATOM	455	N	ASN	A	97	-4.475	78.217	3.107	1.00 92.47	N
ATOM	456	CA	ASN	A	97	-5.802	77.628	3.306	1.00 90.17	C
ATOM	457	CB	ASN	A	97	-5.877	76.275	2.590	1.00 90.45	C
ATOM	458	CG	ASN	A	97	-7.226	76.030	1.950	1.00 90.49	C
ATOM	459	OD1	ASN	A	97	-8.226	75.817	2.635	1.00 90.44	O
ATOM	460	ND2	ASN	A	97	-7.262	76.076	0.626	1.00 90.32	N
ATOM	461	C	ASN	A	97	-6.348	77.469	4.734	1.00 88.40	C
ATOM	462	O	ASN	A	97	-7.566	77.400	4.935	1.00 88.09	O
ATOM	463	N	TYR	A	98	-5.477	77.406	5.732	1.00 85.98	N
ATOM	464	CA	TYR	A	98	-5.976	77.115	7.070	1.00 83.30	C
ATOM	465	CB	TYR	A	98	-5.658	75.656	7.413	1.00 83.44	C
ATOM	466	CG	TYR	A	98	-6.528	74.654	6.691	1.00 82.53	C
ATOM	467	CD1	TYR	A	98	-6.097	74.037	5.526	1.00 81.65	C
ATOM	468	CE1	TYR	A	98	-6.900	73.123	4.870	1.00 81.74	C
ATOM	469	CZ	TYR	A	98	-8.150	72.821	5.387	1.00 82.50	C
ATOM	470	OH	TYR	A	98	-8.976	71.916	4.763	1.00 82.69	O
ATOM	471	CE2	TYR	A	98	-8.593	73.426	6.536	1.00 82.47	C
ATOM	472	CD2	TYR	A	98	-7.786	74.335	7.176	1.00 82.81	C
ATOM	473	C	TYR	A	98	-5.472	78.043	8.165	1.00 81.40	C

Figure 2-11

ATOM	474	O	TYR	A	98	-6.134	78.212	9.194	1.00	80.78	O
ATOM	475	N	VAL	A	99	-4.312	78.647	7.914	1.00	79.12	N
ATOM	476	CA	VAL	A	99	-3.620	79.520	8.858	1.00	77.06	C
ATOM	477	CB	VAL	A	99	-2.250	79.930	8.316	1.00	76.89	C
ATOM	478	CG1	VAL	A	99	-1.778	81.220	8.961	1.00	76.38	C
ATOM	479	CG2	VAL	A	99	-1.257	78.816	8.523	1.00	76.99	C
ATOM	480	C	VAL	A	99	-4.371	80.776	9.281	1.00	76.12	C
ATOM	481	O	VAL	A	99	-4.359	81.122	10.463	1.00	76.00	O
ATOM	482	N	PRO	A	100	-5.038	81.453	8.344	1.00	74.96	N
ATOM	483	CA	PRO	A	100	-5.745	82.683	8.681	1.00	73.81	C
ATOM	484	CB	PRO	A	100	-6.607	82.935	7.443	1.00	74.37	C
ATOM	485	CG	PRO	A	100	-5.900	82.246	6.332	1.00	74.25	C
ATOM	486	CD	PRO	A	100	-5.237	81.075	6.934	1.00	74.75	C
ATOM	487	C	PRO	A	100	-6.628	82.366	9.859	1.00	72.76	C
ATOM	488	O	PRO	A	100	-6.444	82.914	10.938	1.00	72.80	O
ATOM	489	N	GLU	A	101	-7.573	81.461	9.652	1.00	71.36	N
ATOM	490	CA	GLU	A	101	-8.447	81.034	10.718	1.00	70.78	C
ATOM	491	CB	GLU	A	101	-9.148	79.740	10.331	1.00	70.91	C
ATOM	492	CG	GLU	A	101	-10.652	79.863	10.260	1.00	71.70	C
ATOM	493	CD	GLU	A	101	-11.364	78.590	10.663	1.00	73.74	C
ATOM	494	OE1	GLU	A	101	-11.254	77.580	9.934	1.00	74.70	O
ATOM	495	OE2	GLU	A	101	-12.048	78.602	11.710	1.00	75.14	O
ATOM	496	C	GLU	A	101	-7.695	80.833	12.039	1.00	70.43	C
ATOM	497	O	GLU	A	101	-8.296	80.909	13.119	1.00	70.11	O
ATOM	498	N	LEU	A	102	-6.384	80.591	11.949	1.00	69.72	N
ATOM	499	CA	LEU	A	102	-5.563	80.347	13.133	1.00	68.88	C
ATOM	500	CB	LEU	A	102	-4.351	79.455	12.824	1.00	69.25	C
ATOM	501	CG	LEU	A	102	-4.600	77.959	12.613	1.00	69.77	C
ATOM	502	CD1	LEU	A	102	-3.262	77.243	12.439	1.00	71.59	C
ATOM	503	CD2	LEU	A	102	-5.375	77.358	13.752	1.00	69.88	C
ATOM	504	C	LEU	A	102	-5.120	81.632	13.797	1.00	67.73	C
ATOM	505	O	LEU	A	102	-4.709	81.638	14.954	1.00	67.66	O
ATOM	506	N	HIS	A	103	-5.163	82.735	13.077	1.00	66.23	N
ATOM	507	CA	HIS	A	103	-4.928	83.977	13.792	1.00	64.74	C
ATOM	508	CB	HIS	A	103	-4.538	85.109	12.859	1.00	64.74	C
ATOM	509	CG	HIS	A	103	-3.228	85.756	13.194	1.00	65.62	C
ATOM	510	ND1	HIS	A	103	-2.395	85.309	14.196	1.00	66.06	N
ATOM	511	CE1	HIS	A	103	-1.307	86.058	14.224	1.00	68.88	C
ATOM	512	NE2	HIS	A	103	-1.395	86.962	13.265	1.00	68.13	N
ATOM	513	CD2	HIS	A	103	-2.579	86.784	12.594	1.00	67.35	C
ATOM	514	C	HIS	A	103	-6.291	84.224	14.442	1.00	63.04	C
ATOM	515	O	HIS	A	103	-6.398	84.411	15.652	1.00	62.24	O
ATOM	516	N	ALA	A	104	-7.341	84.161	13.624	1.00	61.35	N
ATOM	517	CA	ALA	A	104	-8.704	84.408	14.101	1.00	59.62	C
ATOM	518	CB	ALA	A	104	-9.739	83.923	13.088	1.00	59.48	C
ATOM	519	C	ALA	A	104	-8.903	83.727	15.449	1.00	58.29	C
ATOM	520	O	ALA	A	104	-9.599	84.226	16.339	1.00	57.02	O
ATOM	521	N	ASN	A	105	-8.251	82.584	15.607	1.00	56.89	N
ATOM	522	CA	ASN	A	105	-8.402	81.865	16.847	1.00	54.95	C
ATOM	523	CB	ASN	A	105	-8.738	80.412	16.573	1.00	55.09	C
ATOM	524	CG	ASN	A	105	-10.197	80.218	16.309	1.00	55.52	C
ATOM	525	OD1	ASN	A	105	-10.946	79.798	17.189	1.00	56.13	O
ATOM	526	ND2	ASN	A	105	-10.625	80.541	15.102	1.00	56.23	N
ATOM	527	C	ASN	A	105	-7.270	82.023	17.854	1.00	53.36	C
ATOM	528	O	ASN	A	105	-7.276	81.347	18.874	1.00	53.58	O
ATOM	529	N	ASN	A	106	-6.319	82.917	17.578	1.00	51.31	N
ATOM	530	CA	ASN	A	106	-5.262	83.218	18.540	1.00	49.71	C

Figure 2-12

ATOM	531	CB	ASN	A	106	-5.916	83.605	19.884	1.00	48.24	C
ATOM	532	CG	ASN	A	106	-4.973	84.347	20.815	1.00	45.54	C
ATOM	533	OD1	ASN	A	106	-3.992	84.972	20.372	1.00	36.94	O
ATOM	534	ND2	ASN	A	106	-5.257	84.268	22.132	1.00	39.78	N
ATOM	535	C	ASN	A	106	-4.229	82.070	18.712	1.00	50.06	C
ATOM	536	O	ASN	A	106	-3.585	81.924	19.757	1.00	49.24	O
ATOM	537	N	VAL	A	107	-4.058	81.265	17.668	1.00	50.59	N
ATOM	538	CA	VAL	A	107	-3.107	80.165	17.715	1.00	50.96	C
ATOM	539	CB	VAL	A	107	-3.587	79.013	16.865	1.00	51.12	C
ATOM	540	CG1	VAL	A	107	-2.590	77.849	16.908	1.00	51.69	C
ATOM	541	CG2	VAL	A	107	-4.966	78.574	17.334	1.00	51.89	C
ATOM	542	C	VAL	A	107	-1.720	80.541	17.244	1.00	50.97	C
ATOM	543	O	VAL	A	107	-1.555	81.006	16.153	1.00	51.27	O
ATOM	544	N	LYS	A	108	-0.711	80.343	18.076	1.00	51.88	N
ATOM	545	CA	LYS	A	108	0.654	80.556	17.622	1.00	52.64	C
ATOM	546	CB	LYS	A	108	1.599	80.781	18.798	1.00	51.93	C
ATOM	547	CG	LYS	A	108	2.948	81.312	18.373	1.00	50.63	C
ATOM	548	CD	LYS	A	108	3.843	81.635	19.545	1.00	47.73	C
ATOM	549	CE	LYS	A	108	5.015	82.485	19.080	1.00	46.89	C
ATOM	550	NZ	LYS	A	108	6.076	82.724	20.116	1.00	46.02	N
ATOM	551	C	LYS	A	108	1.060	79.314	16.801	1.00	53.45	C
ATOM	552	O	LYS	A	108	0.571	78.223	17.052	1.00	53.54	O
ATOM	553	N	ILE	A	109	1.911	79.506	15.799	1.00	54.73	N
ATOM	554	CA	ILE	A	109	2.374	78.438	14.919	1.00	54.87	C
ATOM	555	CB	ILE	A	109	2.040	78.749	13.447	1.00	54.96	C
ATOM	556	CG1	ILE	A	109	0.539	78.965	13.243	1.00	55.16	C
ATOM	557	CD1	ILE	A	109	-0.353	77.870	13.828	1.00	53.23	C
ATOM	558	CG2	ILE	A	109	2.565	77.626	12.528	1.00	55.32	C
ATOM	559	C	ILE	A	109	3.875	78.371	15.028	1.00	55.17	C
ATOM	560	O	ILE	A	109	4.548	79.388	14.871	1.00	54.78	O
ATOM	561	N	GLN	A	110	4.412	77.179	15.279	1.00	55.43	N
ATOM	562	CA	GLN	A	110	5.861	77.028	15.373	1.00	55.99	C
ATOM	563	CB	GLN	A	110	6.323	77.297	16.801	1.00	56.12	C
ATOM	564	CG	GLN	A	110	7.748	77.796	16.921	1.00	58.52	C
ATOM	565	CD	GLN	A	110	7.970	78.558	18.220	1.00	60.69	C
ATOM	566	OE1	GLN	A	110	8.868	79.397	18.304	1.00	60.77	O
ATOM	567	NE2	GLN	A	110	7.145	78.271	19.231	1.00	59.83	N
ATOM	568	C	GLN	A	110	6.243	75.622	14.931	1.00	55.64	C
ATOM	569	O	GLN	A	110	5.407	74.722	14.923	1.00	55.72	O
ATOM	570	N	MET	A	111	7.499	75.417	14.588	1.00	55.37	N
ATOM	571	CA	MET	A	111	7.889	74.114	14.076	1.00	56.39	C
ATOM	572	CB	MET	A	111	8.027	74.193	12.556	1.00	56.31	C
ATOM	573	CG	MET	A	111	6.693	74.434	11.849	1.00	59.75	C
ATOM	574	SD	MET	A	111	6.857	75.667	10.521	1.00	67.16	S
ATOM	575	CE	MET	A	111	8.787	75.661	10.411	1.00	66.60	C
ATOM	576	C	MET	A	111	9.155	73.543	14.720	1.00	55.75	C
ATOM	577	O	MET	A	111	9.900	74.268	15.360	1.00	55.49	O
ATOM	578	N	ILE	A	112	9.374	72.240	14.573	1.00	55.38	N
ATOM	579	CA	ILE	A	112	10.598	71.611	15.095	1.00	56.05	C
ATOM	580	CB	ILE	A	112	10.340	70.778	16.381	1.00	55.65	C
ATOM	581	CG1	ILE	A	112	8.974	70.107	16.323	1.00	55.23	C
ATOM	582	CD1	ILE	A	112	8.606	69.424	17.589	1.00	57.21	C
ATOM	583	CG2	ILE	A	112	10.474	71.620	17.599	1.00	55.06	C
ATOM	584	C	ILE	A	112	11.236	70.682	14.087	1.00	56.57	C
ATOM	585	O	ILE	A	112	10.567	70.085	13.272	1.00	55.89	O
ATOM	586	N	GLY	A	113	12.540	70.544	14.161	1.00	58.25	N
ATOM	587	CA	GLY	A	113	13.202	69.604	13.293	1.00	61.42	C

Figure 2-13

ATOM	588	C	GLY	A	113	14.331	70.168	12.464	1.00	63.49	C
ATOM	589	O	GLY	A	113	15.074	71.072	12.867	1.00	63.22	O
ATOM	590	N	GLU	A	114	14.488	69.584	11.293	1.00	65.48	N
ATOM	591	CA	GLU	A	114	15.513	70.045	10.400	1.00	67.94	C
ATOM	592	CB	GLU	A	114	16.475	68.920	10.030	1.00	67.98	C
ATOM	593	CG	GLU	A	114	17.341	68.548	11.227	1.00	68.11	C
ATOM	594	CD	GLU	A	114	18.593	67.774	10.870	1.00	69.64	C
ATOM	595	OE1	GLU	A	114	18.610	66.538	11.060	1.00	69.21	O
ATOM	596	OE2	GLU	A	114	19.573	68.406	10.426	1.00	70.63	O
ATOM	597	C	GLU	A	114	14.774	70.708	9.254	1.00	69.36	C
ATOM	598	O	GLU	A	114	14.406	70.103	8.253	1.00	69.10	O
ATOM	599	N	THR	A	115	14.495	71.975	9.505	1.00	71.65	N
ATOM	600	CA	THR	A	115	13.772	72.843	8.604	1.00	73.76	C
ATOM	601	CB	THR	A	115	13.229	74.049	9.414	1.00	73.81	C
ATOM	602	OG1	THR	A	115	14.282	74.612	10.228	1.00	72.97	O
ATOM	603	CG2	THR	A	115	12.188	73.569	10.438	1.00	73.79	C
ATOM	604	C	THR	A	115	14.724	73.312	7.518	1.00	75.19	C
ATOM	605	O	THR	A	115	14.372	73.366	6.351	1.00	75.39	O
ATOM	606	N	ASP	A	116	15.949	73.604	7.931	1.00	77.29	N
ATOM	607	CA	ASP	A	116	16.991	74.121	7.064	1.00	79.32	C
ATOM	608	CB	ASP	A	116	18.296	74.207	7.853	1.00	79.58	C
ATOM	609	CG	ASP	A	116	18.071	74.133	9.364	1.00	81.15	C
ATOM	610	OD1	ASP	A	116	17.378	75.022	9.908	1.00	82.97	O
ATOM	611	OD2	ASP	A	116	18.539	73.221	10.091	1.00	81.76	O
ATOM	612	C	ASP	A	116	17.208	73.261	5.823	1.00	80.54	C
ATOM	613	O	ASP	A	116	17.586	73.769	4.770	1.00	81.09	O
ATOM	614	N	ALA	A	117	16.969	71.960	5.944	1.00	81.87	N
ATOM	615	CA	ALA	A	117	17.201	71.037	4.840	1.00	82.87	C
ATOM	616	CB	ALA	A	117	17.747	69.714	5.361	1.00	82.71	C
ATOM	617	C	ALA	A	117	15.946	70.807	4.014	1.00	83.71	C
ATOM	618	O	ALA	A	117	15.894	69.876	3.220	1.00	83.73	O
ATOM	619	N	LEU	A	118	14.943	71.664	4.191	1.00	84.96	N
ATOM	620	CA	LEU	A	118	13.670	71.529	3.475	1.00	86.16	C
ATOM	621	CB	LEU	A	118	12.515	71.971	4.372	1.00	86.24	C
ATOM	622	CG	LEU	A	118	11.972	71.017	5.428	1.00	86.95	C
ATOM	623	CD1	LEU	A	118	11.446	71.814	6.600	1.00	87.28	C
ATOM	624	CD2	LEU	A	118	10.876	70.117	4.840	1.00	87.99	C
ATOM	625	C	LEU	A	118	13.616	72.326	2.170	1.00	86.94	C
ATOM	626	O	LEU	A	118	14.511	73.115	1.874	1.00	86.79	O
ATOM	627	N	PRO	A	119	12.569	72.084	1.383	1.00	87.86	N
ATOM	628	CA	PRO	A	119	12.322	72.814	0.134	1.00	88.76	C
ATOM	629	CB	PRO	A	119	11.083	72.111	-0.439	1.00	88.74	C
ATOM	630	CG	PRO	A	119	11.047	70.779	0.239	1.00	88.44	C
ATOM	631	CD	PRO	A	119	11.568	71.027	1.613	1.00	88.01	C
ATOM	632	C	PRO	A	119	11.995	74.287	0.404	1.00	89.43	C
ATOM	633	O	PRO	A	119	11.443	74.575	1.462	1.00	89.78	O
ATOM	634	N	ALA	A	120	12.324	75.184	-0.528	1.00	89.84	N
ATOM	635	CA	ALA	A	120	12.062	76.616	-0.371	1.00	90.12	C
ATOM	636	CB	ALA	A	120	12.569	77.389	-1.568	1.00	89.90	C
ATOM	637	C	ALA	A	120	10.577	76.858	-0.173	1.00	90.31	C
ATOM	638	O	ALA	A	120	10.142	77.169	0.933	1.00	89.99	O
ATOM	639	N	GLN	A	121	9.800	76.710	-1.243	1.00	90.80	N
ATOM	640	CA	GLN	A	121	8.356	76.854	-1.143	1.00	91.36	C
ATOM	641	CB	GLN	A	121	7.646	75.986	-2.184	1.00	91.56	C
ATOM	642	CG	GLN	A	121	7.346	76.684	-3.502	1.00	92.44	C
ATOM	643	CD	GLN	A	121	6.393	75.877	-4.372	1.00	94.07	C
ATOM	644	OE1	GLN	A	121	5.176	75.936	-4.188	1.00	94.81	O

Figure 2-14

ATOM	645	NE2	GLN	A	121	6.943	75.118	-5.315	1.00	94.10	N
ATOM	646	C	GLN	A	121	7.909	76.459	0.261	1.00	91.47	C
ATOM	647	O	GLN	A	121	7.146	77.176	0.905	1.00	91.59	O
ATOM	648	N	THR	A	122	8.395	75.317	0.737	1.00	91.76	N
ATOM	649	CA	THR	A	122	8.074	74.862	2.082	1.00	91.75	C
ATOM	650	CB	THR	A	122	8.595	73.454	2.296	1.00	91.83	C
ATOM	651	OG1	THR	A	122	7.555	72.523	1.981	1.00	91.69	O
ATOM	652	CG2	THR	A	122	8.846	73.206	3.772	1.00	92.02	C
ATOM	653	C	THR	A	122	8.631	75.785	3.162	1.00	91.61	C
ATOM	654	O	THR	A	122	7.873	76.447	3.860	1.00	91.80	O
ATOM	655	N	PHE	A	123	9.952	75.837	3.289	1.00	91.42	N
ATOM	656	CA	PHE	A	123	10.582	76.665	4.303	1.00	91.38	C
ATOM	657	CB	PHE	A	123	12.058	76.822	3.991	1.00	91.20	C
ATOM	658	CG	PHE	A	123	12.851	77.424	5.104	1.00	90.87	C
ATOM	659	CD1	PHE	A	123	12.488	77.227	6.416	1.00	91.08	C
ATOM	660	CE1	PHE	A	123	13.229	77.774	7.437	1.00	90.48	C
ATOM	661	CZ	PHE	A	123	14.342	78.517	7.153	1.00	90.17	C
ATOM	662	CE2	PHE	A	123	14.713	78.714	5.853	1.00	90.21	C
ATOM	663	CD2	PHE	A	123	13.976	78.167	4.838	1.00	90.19	C
ATOM	664	C	PHE	A	123	9.934	78.030	4.305	1.00	91.81	C
ATOM	665	O	PHE	A	123	9.610	78.590	5.345	1.00	92.06	O
ATOM	666	N	GLU	A	124	9.747	78.557	3.109	1.00	92.09	N
ATOM	667	CA	GLU	A	124	9.161	79.860	2.934	1.00	92.08	C
ATOM	668	CB	GLU	A	124	9.017	80.152	1.446	1.00	92.34	C
ATOM	669	CG	GLU	A	124	10.341	80.340	0.728	1.00	92.82	C
ATOM	670	CD	GLU	A	124	10.273	81.454	-0.297	1.00	93.12	C
ATOM	671	OE1	GLU	A	124	9.409	81.381	-1.193	1.00	92.80	O
ATOM	672	OE2	GLU	A	124	11.065	82.415	-0.196	1.00	93.37	O
ATOM	673	C	GLU	A	124	7.808	79.932	3.600	1.00	91.88	C
ATOM	674	O	GLU	A	124	7.562	80.814	4.409	1.00	92.11	O
ATOM	675	N	ALA	A	125	6.932	78.998	3.258	1.00	91.51	N
ATOM	676	CA	ALA	A	125	5.577	78.988	3.803	1.00	91.44	C
ATOM	677	CB	ALA	A	125	4.710	77.964	3.085	1.00	91.57	C
ATOM	678	C	ALA	A	125	5.545	78.732	5.304	1.00	91.25	C
ATOM	679	O	ALA	A	125	4.631	79.174	6.000	1.00	91.18	O
ATOM	680	N	LEU	A	126	6.531	78.004	5.808	1.00	90.77	N
ATOM	681	CA	LEU	A	126	6.552	77.730	7.227	1.00	90.12	C
ATOM	682	CB	LEU	A	126	7.439	76.534	7.543	1.00	90.18	C
ATOM	683	CG	LEU	A	126	6.844	75.241	6.976	1.00	90.17	C
ATOM	684	CD1	LEU	A	126	7.717	74.049	7.307	1.00	91.42	C
ATOM	685	CD2	LEU	A	126	5.431	75.022	7.474	1.00	89.66	C
ATOM	686	C	LEU	A	126	6.980	78.986	7.953	1.00	89.60	C
ATOM	687	O	LEU	A	126	6.321	79.404	8.897	1.00	89.49	O
ATOM	688	N	THR	A	127	8.049	79.615	7.480	1.00	88.99	N
ATOM	689	CA	THR	A	127	8.509	80.852	8.092	1.00	88.57	C
ATOM	690	CB	THR	A	127	9.795	81.336	7.445	1.00	88.35	C
ATOM	691	OG1	THR	A	127	10.878	80.532	7.908	1.00	88.48	O
ATOM	692	CG2	THR	A	127	10.159	82.712	7.964	1.00	88.38	C
ATOM	693	C	THR	A	127	7.435	81.935	8.013	1.00	88.37	C
ATOM	694	O	THR	A	127	7.365	82.817	8.866	1.00	88.81	O
ATOM	695	N	ALA	A	128	6.590	81.874	6.994	1.00	87.63	N
ATOM	696	CA	ALA	A	128	5.532	82.863	6.888	1.00	86.93	C
ATOM	697	CB	ALA	A	128	4.754	82.704	5.599	1.00	86.98	C
ATOM	698	C	ALA	A	128	4.630	82.640	8.070	1.00	86.24	C
ATOM	699	O	ALA	A	128	4.338	83.560	8.822	1.00	86.42	O
ATOM	700	N	ALA	A	129	4.204	81.394	8.230	1.00	85.26	N
ATOM	701	CA	ALA	A	129	3.328	81.014	9.321	1.00	83.97	C

Figure 2-15

ATOM	702	CB	ALA	A	129	3.047	79.545	9.269	1.00	84.21	C
ATOM	703	C	ALA	A	129	3.939	81.392	10.664	1.00	83.12	C
ATOM	704	O	ALA	A	129	3.255	81.439	11.674	1.00	83.02	O
ATOM	705	N	GLU	A	130	5.229	81.678	10.676	1.00	81.87	N
ATOM	706	CA	GLU	A	130	5.849	82.046	11.924	1.00	80.82	C
ATOM	707	CB	GLU	A	130	7.305	81.569	11.989	1.00	80.94	C
ATOM	708	CG	GLU	A	130	7.427	80.060	12.142	1.00	81.03	C
ATOM	709	CD	GLU	A	130	8.845	79.579	12.403	1.00	80.60	C
ATOM	710	OE1	GLU	A	130	8.990	78.423	12.850	1.00	80.79	O
ATOM	711	OE2	GLU	A	130	9.810	80.336	12.159	1.00	79.92	O
ATOM	712	C	GLU	A	130	5.747	83.536	12.163	1.00	79.97	C
ATOM	713	O	GLU	A	130	5.139	83.959	13.136	1.00	79.87	O
ATOM	714	N	GLU	A	131	6.336	84.325	11.266	1.00	78.85	N
ATOM	715	CA	GLU	A	131	6.377	85.778	11.413	1.00	77.40	C
ATOM	716	CB	GLU	A	131	7.155	86.417	10.268	1.00	77.65	C
ATOM	717	CG	GLU	A	131	8.635	86.070	10.280	1.00	78.98	C
ATOM	718	CD	GLU	A	131	9.267	86.190	8.895	1.00	81.19	C
ATOM	719	OE1	GLU	A	131	8.552	86.024	7.876	1.00	81.08	O
ATOM	720	OE2	GLU	A	131	10.486	86.451	8.820	1.00	80.23	O
ATOM	721	C	GLU	A	131	4.999	86.413	11.579	1.00	76.01	C
ATOM	722	O	GLU	A	131	4.879	87.554	12.030	1.00	76.23	O
ATOM	723	N	LEU	A	132	3.965	85.649	11.254	1.00	73.80	N
ATOM	724	CA	LEU	A	132	2.596	86.102	11.389	1.00	72.14	C
ATOM	725	CB	LEU	A	132	1.691	85.323	10.443	1.00	72.00	C
ATOM	726	CG	LEU	A	132	0.271	85.874	10.272	1.00	73.37	C
ATOM	727	CD1	LEU	A	132	0.248	86.870	9.126	1.00	74.33	C
ATOM	728	CD2	LEU	A	132	-0.738	84.769	10.011	1.00	73.31	C
ATOM	729	C	LEU	A	132	2.115	85.869	12.814	1.00	70.70	C
ATOM	730	O	LEU	A	132	1.106	86.435	13.223	1.00	70.87	O
ATOM	731	N	THR	A	133	2.849	85.051	13.571	1.00	67.97	N
ATOM	732	CA	THR	A	133	2.426	84.650	14.908	1.00	65.03	C
ATOM	733	CB	THR	A	133	2.063	83.146	14.917	1.00	65.89	C
ATOM	734	OG1	THR	A	133	3.130	82.382	14.324	1.00	64.47	O
ATOM	735	CG2	THR	A	133	0.865	82.851	14.023	1.00	65.15	C
ATOM	736	C	THR	A	133	3.455	84.902	15.999	1.00	63.35	C
ATOM	737	O	THR	A	133	3.216	84.594	17.150	1.00	62.33	O
ATOM	738	N	LYS	A	134	4.602	85.462	15.658	1.00	61.91	N
ATOM	739	CA	LYS	A	134	5.618	85.647	16.673	1.00	61.43	C
ATOM	740	CB	LYS	A	134	6.753	86.542	16.174	1.00	61.84	C
ATOM	741	CG	LYS	A	134	6.652	87.996	16.567	1.00	63.83	C
ATOM	742	CD	LYS	A	134	7.913	88.730	16.142	1.00	66.10	C
ATOM	743	CE	LYS	A	134	9.128	88.021	16.688	1.00	69.36	C
ATOM	744	NZ	LYS	A	134	10.356	88.314	15.905	1.00	72.18	N
ATOM	745	C	LYS	A	134	5.003	86.159	17.997	1.00	60.68	C
ATOM	746	O	LYS	A	134	5.568	85.960	19.095	1.00	60.21	O
ATOM	747	N	ASN	A	135	3.829	86.787	17.910	1.00	59.06	N
ATOM	748	CA	ASN	A	135	3.173	87.286	19.124	1.00	56.39	C
ATOM	749	CB	ASN	A	135	2.949	88.793	19.090	1.00	56.90	C
ATOM	750	CG	ASN	A	135	3.720	89.477	18.019	1.00	55.77	C
ATOM	751	OD1	ASN	A	135	4.849	89.927	18.241	1.00	54.86	O
ATOM	752	ND2	ASN	A	135	3.104	89.602	16.837	1.00	55.00	N
ATOM	753	C	ASN	A	135	1.837	86.678	19.496	1.00	54.59	C
ATOM	754	O	ASN	A	135	1.201	87.189	20.417	1.00	54.72	O
ATOM	755	N	ASN	A	136	1.362	85.629	18.843	1.00	52.92	N
ATOM	756	CA	ASN	A	136	0.152	85.025	19.411	1.00	51.63	C
ATOM	757	CB	ASN	A	136	-0.516	83.962	18.525	1.00	52.18	C
ATOM	758	CG	ASN	A	136	-1.459	84.574	17.455	1.00	53.33	C

Figure 2-16

ATOM	759	OD1	ASN	A	136	-2.402	83.928	16.959	1.00	49.49	O
ATOM	760	ND2	ASN	A	136	-1.174	85.814	17.082	1.00	53.42	N
ATOM	761	C	ASN	A	136	0.413	84.511	20.857	1.00	50.80	C
ATOM	762	O	ASN	A	136	1.595	84.427	21.335	1.00	49.85	O
ATOM	763	N	THR	A	137	-0.696	84.223	21.549	1.00	48.76	N
ATOM	764	CA	THR	A	137	-0.686	83.874	22.961	1.00	46.96	C
ATOM	765	CB	THR	A	137	-0.741	85.145	23.911	1.00	47.44	C
ATOM	766	OG1	THR	A	137	-2.064	85.698	23.987	1.00	42.44	O
ATOM	767	CG2	THR	A	137	0.126	86.283	23.417	1.00	46.13	C
ATOM	768	C	THR	A	137	-1.804	82.894	23.317	1.00	46.83	C
ATOM	769	O	THR	A	137	-2.087	82.683	24.475	1.00	47.04	O
ATOM	770	N	GLY	A	138	-2.462	82.310	22.330	1.00	46.40	N
ATOM	771	CA	GLY	A	138	-3.366	81.208	22.621	1.00	46.80	C
ATOM	772	C	GLY	A	138	-2.633	79.862	22.416	1.00	47.03	C
ATOM	773	O	GLY	A	138	-1.387	79.774	22.476	1.00	45.52	O
ATOM	774	N	LEU	A	139	-3.414	78.823	22.149	1.00	47.55	N
ATOM	775	CA	LEU	A	139	-2.864	77.481	21.912	1.00	48.95	C
ATOM	776	CB	LEU	A	139	-3.892	76.533	21.300	1.00	48.25	C
ATOM	777	CG	LEU	A	139	-3.169	75.257	20.828	1.00	49.40	C
ATOM	778	CD1	LEU	A	139	-3.064	74.269	21.974	1.00	48.81	C
ATOM	779	CD2	LEU	A	139	-3.831	74.573	19.640	1.00	48.37	C
ATOM	780	C	LEU	A	139	-1.677	77.493	20.982	1.00	49.15	C
ATOM	781	O	LEU	A	139	-1.636	78.266	20.051	1.00	50.09	O
ATOM	782	N	ILE	A	140	-0.720	76.613	21.215	1.00	49.70	N
ATOM	783	CA	ILE	A	140	0.428	76.554	20.326	1.00	49.90	C
ATOM	784	CB	ILE	A	140	1.707	76.566	21.101	1.00	49.67	C
ATOM	785	CG1	ILE	A	140	1.865	77.893	21.812	1.00	48.76	C
ATOM	786	CD1	ILE	A	140	3.031	77.879	22.759	1.00	49.26	C
ATOM	787	CG2	ILE	A	140	2.866	76.271	20.171	1.00	49.87	C
ATOM	788	C	ILE	A	140	0.396	75.317	19.445	1.00	49.82	C
ATOM	789	O	ILE	A	140	0.237	74.198	19.935	1.00	49.72	O
ATOM	790	N	LEU	A	141	0.546	75.530	18.144	1.00	49.57	N
ATOM	791	CA	LEU	A	141	0.547	74.428	17.200	1.00	49.69	C
ATOM	792	CB	LEU	A	141	-0.262	74.766	15.958	1.00	49.79	C
ATOM	793	CG	LEU	A	141	-0.236	73.704	14.855	1.00	50.43	C
ATOM	794	CD1	LEU	A	141	-0.665	72.319	15.357	1.00	48.15	C
ATOM	795	CD2	LEU	A	141	-1.108	74.165	13.682	1.00	46.92	C
ATOM	796	C	LEU	A	141	1.976	74.127	16.823	1.00	49.02	C
ATOM	797	O	LEU	A	141	2.618	74.917	16.151	1.00	48.95	O
ATOM	798	N	ASN	A	142	2.469	72.990	17.305	1.00	48.40	N
ATOM	799	CA	ASN	A	142	3.825	72.549	17.043	1.00	48.20	C
ATOM	800	CB	ASN	A	142	4.465	72.185	18.371	1.00	48.59	C
ATOM	801	CG	ASN	A	142	5.928	72.512	18.415	1.00	50.53	C
ATOM	802	OD1	ASN	A	142	6.392	73.449	17.764	1.00	52.01	O
ATOM	803	ND2	ASN	A	142	6.678	71.735	19.197	1.00	54.19	N
ATOM	804	C	ASN	A	142	3.897	71.374	16.002	1.00	47.43	C
ATOM	805	O	ASN	A	142	3.560	70.218	16.291	1.00	46.40	O
ATOM	806	N	PHE	A	143	4.329	71.722	14.791	1.00	47.42	N
ATOM	807	CA	PHE	A	143	4.465	70.819	13.637	1.00	46.93	C
ATOM	808	CB	PHE	A	143	4.403	71.637	12.327	1.00	47.60	C
ATOM	809	CG	PHE	A	143	3.035	71.823	11.801	1.00	49.42	C
ATOM	810	CD1	PHE	A	143	2.254	70.725	11.481	1.00	51.22	C
ATOM	811	CE1	PHE	A	143	0.975	70.878	11.017	1.00	52.34	C
ATOM	812	CZ	PHE	A	143	0.454	72.155	10.874	1.00	54.91	C
ATOM	813	CE2	PHE	A	143	1.232	73.262	11.194	1.00	51.47	C
ATOM	814	CD2	PHE	A	143	2.511	73.087	11.655	1.00	51.08	C
ATOM	815	C	PHE	A	143	5.832	70.190	13.635	1.00	45.29	C

Figure 2-17

ATOM	816	O	PHE	A	143	6.811	70.890	13.444	1.00	44.99	O
ATOM	817	N	ALA	A	144	5.922	68.884	13.821	1.00	43.92	N
ATOM	818	CA	ALA	A	144	7.239	68.260	13.682	1.00	43.09	C
ATOM	819	CB	ALA	A	144	7.359	67.038	14.581	1.00	42.74	C
ATOM	820	C	ALA	A	144	7.432	67.909	12.202	1.00	41.63	C
ATOM	821	O	ALA	A	144	6.699	67.110	11.650	1.00	40.95	O
ATOM	822	N	LEU	A	145	8.383	68.553	11.550	1.00	41.29	N
ATOM	823	CA	LEU	A	145	8.591	68.319	10.128	1.00	41.55	C
ATOM	824	CB	LEU	A	145	8.079	69.485	9.278	1.00	42.18	C
ATOM	825	CG	LEU	A	145	6.576	69.346	9.050	1.00	43.68	C
ATOM	826	CD1	LEU	A	145	5.875	70.324	9.955	1.00	43.98	C
ATOM	827	CD2	LEU	A	145	6.224	69.583	7.595	1.00	45.11	C
ATOM	828	C	LEU	A	145	10.043	68.039	9.817	1.00	41.21	C
ATOM	829	O	LEU	A	145	10.936	68.789	10.227	1.00	40.78	O
ATOM	830	N	ASN	A	146	10.269	66.960	9.067	1.00	40.67	N
ATOM	831	CA	ASN	A	146	11.628	66.495	8.838	1.00	40.71	C
ATOM	832	CB	ASN	A	146	12.429	67.496	8.045	1.00	41.58	C
ATOM	833	CG	ASN	A	146	13.443	66.826	7.188	1.00	45.60	C
ATOM	834	OD1	ASN	A	146	13.394	65.600	7.038	1.00	51.65	O
ATOM	835	ND2	ASN	A	146	14.371	67.594	6.611	1.00	48.14	N
ATOM	836	C	ASN	A	146	12.295	66.270	10.185	1.00	39.01	C
ATOM	837	O	ASN	A	146	13.460	66.604	10.427	1.00	37.30	O
ATOM	838	N	TYR	A	147	11.524	65.656	11.059	1.00	37.79	N
ATOM	839	CA	TYR	A	147	11.952	65.524	12.443	1.00	36.91	C
ATOM	840	CB	TYR	A	147	10.894	66.146	13.399	1.00	35.86	C
ATOM	841	CG	TYR	A	147	11.126	65.770	14.843	1.00	34.67	C
ATOM	842	CD1	TYR	A	147	11.813	66.612	15.725	1.00	31.76	C
ATOM	843	CE1	TYR	A	147	12.043	66.224	17.042	1.00	27.36	C
ATOM	844	CZ	TYR	A	147	11.581	64.983	17.477	1.00	27.08	C
ATOM	845	OH	TYR	A	147	11.749	64.519	18.783	1.00	22.64	O
ATOM	846	CE2	TYR	A	147	10.942	64.158	16.610	1.00	29.47	C
ATOM	847	CD2	TYR	A	147	10.699	64.551	15.317	1.00	33.67	C
ATOM	848	C	TYR	A	147	12.249	64.088	12.823	1.00	35.21	C
ATOM	849	O	TYR	A	147	11.569	63.162	12.388	1.00	34.72	O
ATOM	850	N	GLY	A	148	13.268	63.919	13.642	1.00	34.54	N
ATOM	851	CA	GLY	A	148	13.594	62.602	14.179	1.00	33.35	C
ATOM	852	C	GLY	A	148	14.155	62.722	15.581	1.00	32.18	C
ATOM	853	O	GLY	A	148	15.115	63.468	15.804	1.00	31.34	O
ATOM	854	N	GLY	A	149	13.581	61.971	16.524	1.00	31.06	N
ATOM	855	CA	GLY	A	149	14.041	62.029	17.902	1.00	30.02	C
ATOM	856	C	GLY	A	149	15.548	61.832	18.082	1.00	29.38	C
ATOM	857	O	GLY	A	149	16.254	62.664	18.695	1.00	27.57	O
ATOM	858	N	ARG	A	150	16.048	60.725	17.534	1.00	29.27	N
ATOM	859	CA	ARG	A	150	17.450	60.410	17.748	1.00	29.09	C
ATOM	860	CB	ARG	A	150	17.855	59.040	17.195	1.00	28.69	C
ATOM	861	CG	ARG	A	150	17.678	57.861	18.172	1.00	27.58	C
ATOM	862	CD	ARG	A	150	17.724	56.538	17.443	1.00	24.83	C
ATOM	863	NE	ARG	A	150	17.583	55.358	18.289	1.00	26.11	N
ATOM	864	CZ	ARG	A	150	17.550	54.157	17.770	1.00	25.86	C
ATOM	865	NH1	ARG	A	150	17.681	54.037	16.445	1.00	28.00	N
ATOM	866	NH2	ARG	A	150	17.371	53.091	18.531	1.00	26.81	N
ATOM	867	C	ARG	A	150	18.305	61.512	17.180	1.00	30.69	C
ATOM	868	O	ARG	A	150	19.264	61.918	17.812	1.00	29.84	O
ATOM	869	N	ALA	A	151	17.946	62.017	15.997	1.00	31.70	N
ATOM	870	CA	ALA	A	151	18.741	63.072	15.394	1.00	33.31	C
ATOM	871	CB	ALA	A	151	18.295	63.340	13.956	1.00	32.00	C
ATOM	872	C	ALA	A	151	18.704	64.355	16.236	1.00	34.74	C

Figure 2-18

ATOM	873	O	ALA	A	151	19.712	65.043	16.369	1.00	35.44	O
ATOM	874	N	GLU	A	152	17.543	64.674	16.802	1.00	35.83	N
ATOM	875	CA	GLU	A	152	17.418	65.868	17.618	1.00	37.15	C
ATOM	876	CB	GLU	A	152	15.983	66.089	18.106	1.00	36.79	C
ATOM	877	CG	GLU	A	152	15.866	66.979	19.327	1.00	38.99	C
ATOM	878	CD	GLU	A	152	14.422	67.166	19.771	1.00	42.53	C
ATOM	879	OE1	GLU	A	152	13.707	66.163	20.004	1.00	44.20	O
ATOM	880	OE2	GLU	A	152	13.983	68.319	19.877	1.00	41.36	O
ATOM	881	C	GLU	A	152	18.411	65.831	18.764	1.00	37.37	C
ATOM	882	O	GLU	A	152	19.177	66.753	18.947	1.00	37.75	O
ATOM	883	N	ILE	A	153	18.412	64.743	19.513	1.00	38.47	N
ATOM	884	CA	ILE	A	153	19.336	64.603	20.591	1.00	38.62	C
ATOM	885	CB	ILE	A	153	19.183	63.238	21.242	1.00	38.10	C
ATOM	886	CG1	ILE	A	153	17.886	63.176	22.059	1.00	38.18	C
ATOM	887	CD1	ILE	A	153	17.489	61.774	22.464	1.00	39.99	C
ATOM	888	CG2	ILE	A	153	20.397	62.893	22.109	1.00	34.91	C
ATOM	889	C	ILE	A	153	20.722	64.772	20.002	1.00	41.23	C
ATOM	890	O	ILE	A	153	21.589	65.442	20.594	1.00	41.74	O
ATOM	891	N	THR	A	154	20.937	64.193	18.828	1.00	42.79	N
ATOM	892	CA	THR	A	154	22.260	64.239	18.241	1.00	45.39	C
ATOM	893	CB	THR	A	154	22.348	63.426	16.916	1.00	45.15	C
ATOM	894	OG1	THR	A	154	21.849	62.101	17.113	1.00	44.11	O
ATOM	895	CG2	THR	A	154	23.796	63.175	16.568	1.00	45.70	C
ATOM	896	C	THR	A	154	22.578	65.701	18.013	1.00	46.88	C
ATOM	897	O	THR	A	154	23.571	66.209	18.513	1.00	46.44	O
ATOM	898	N	GLN	A	155	21.694	66.368	17.282	1.00	49.66	N
ATOM	899	CA	GLN	A	155	21.825	67.787	16.975	1.00	52.78	C
ATOM	900	CB	GLN	A	155	20.547	68.302	16.327	1.00	53.46	C
ATOM	901	CG	GLN	A	155	20.354	69.835	16.393	1.00	56.87	C
ATOM	902	CD	GLN	A	155	19.737	70.339	17.706	1.00	60.42	C
ATOM	903	OE1	GLN	A	155	18.639	69.932	18.097	1.00	61.66	O
ATOM	904	NE2	GLN	A	155	20.436	71.243	18.366	1.00	62.39	N
ATOM	905	C	GLN	A	155	22.074	68.570	18.242	1.00	54.42	C
ATOM	906	O	GLN	A	155	22.847	69.523	18.250	1.00	54.76	O
ATOM	907	N	ALA	A	156	21.416	68.160	19.317	1.00	56.03	N
ATOM	908	CA	ALA	A	156	21.598	68.829	20.595	1.00	57.99	C
ATOM	909	CB	ALA	A	156	20.442	68.529	21.547	1.00	57.88	C
ATOM	910	C	ALA	A	156	22.916	68.456	21.240	1.00	58.89	C
ATOM	911	O	ALA	A	156	23.641	69.319	21.696	1.00	59.03	O
ATOM	912	N	LEU	A	157	23.235	67.172	21.308	1.00	60.58	N
ATOM	913	CA	LEU	A	157	24.490	66.818	21.958	1.00	62.01	C
ATOM	914	CB	LEU	A	157	24.586	65.315	22.276	1.00	61.87	C
ATOM	915	CG	LEU	A	157	24.305	64.875	23.743	1.00	60.90	C
ATOM	916	CD1	LEU	A	157	22.841	64.946	24.118	1.00	59.01	C
ATOM	917	CD2	LEU	A	157	24.824	63.495	24.067	1.00	59.17	C
ATOM	918	C	LEU	A	157	25.638	67.327	21.102	1.00	63.38	C
ATOM	919	O	LEU	A	157	26.778	67.358	21.544	1.00	63.80	O
ATOM	920	N	LYS	A	158	25.306	67.782	19.893	1.00	64.80	N
ATOM	921	CA	LYS	A	158	26.294	68.299	18.961	1.00	66.10	C
ATOM	922	CB	LYS	A	158	25.781	68.188	17.523	1.00	66.40	C
ATOM	923	CG	LYS	A	158	26.873	68.045	16.459	1.00	68.10	C
ATOM	924	CD	LYS	A	158	26.282	67.770	15.056	1.00	70.32	C
ATOM	925	CE	LYS	A	158	27.134	66.768	14.270	1.00	72.59	C
ATOM	926	NZ	LYS	A	158	26.799	66.656	12.812	1.00	73.21	N
ATOM	927	C	LYS	A	158	26.612	69.747	19.282	1.00	66.72	C
ATOM	928	O	LYS	A	158	27.759	70.107	19.464	1.00	66.43	O
ATOM	929	N	LEU	A	159	25.579	70.576	19.355	1.00	68.14	N

Figure 2-19

ATOM	930	CA	LEU	A	159	25.749	71.998	19.640	1.00	68.99	C
ATOM	931	CB	LEU	A	159	24.422	72.745	19.477	1.00	68.93	C
ATOM	932	CG	LEU	A	159	23.837	72.950	18.076	1.00	69.53	C
ATOM	933	CD1	LEU	A	159	22.378	73.404	18.141	1.00	70.00	C
ATOM	934	CD2	LEU	A	159	24.647	73.957	17.278	1.00	71.07	C
ATOM	935	C	LEU	A	159	26.319	72.204	21.046	1.00	69.63	C
ATOM	936	O	LEU	A	159	26.999	73.203	21.309	1.00	69.31	O
ATOM	937	N	ILE	A	160	26.034	71.261	21.943	1.00	70.78	N
ATOM	938	CA	ILE	A	160	26.548	71.298	23.317	1.00	72.24	C
ATOM	939	CB	ILE	A	160	25.850	70.240	24.195	1.00	72.35	C
ATOM	940	CG1	ILE	A	160	24.428	70.683	24.543	1.00	72.01	C
ATOM	941	CD1	ILE	A	160	23.713	69.730	25.479	1.00	71.40	C
ATOM	942	CG2	ILE	A	160	26.658	69.957	25.472	1.00	71.35	C
ATOM	943	C	ILE	A	160	28.072	71.112	23.367	1.00	73.46	C
ATOM	944	O	ILE	A	160	28.752	71.770	24.141	1.00	73.75	O
ATOM	945	N	SER	A	161	28.599	70.228	22.530	1.00	74.86	N
ATOM	946	CA	SER	A	161	30.039	69.972	22.457	1.00	76.30	C
ATOM	947	CB	SER	A	161	30.287	68.818	21.503	1.00	76.28	C
ATOM	948	OG	SER	A	161	29.651	69.079	20.262	1.00	75.57	O
ATOM	949	C	SER	A	161	30.818	71.180	21.946	1.00	77.50	C
ATOM	950	O	SER	A	161	31.892	71.500	22.449	1.00	77.49	O
ATOM	951	N	GLN	A	162	30.286	71.822	20.913	1.00	79.09	N
ATOM	952	CA	GLN	A	162	30.895	73.028	20.365	1.00	80.72	C
ATOM	953	CB	GLN	A	162	30.101	73.524	19.149	1.00	80.55	C
ATOM	954	CG	GLN	A	162	30.694	74.736	18.439	1.00	81.36	C
ATOM	955	CD	GLN	A	162	31.837	74.395	17.487	1.00	81.76	C
ATOM	956	OE1	GLN	A	162	31.836	73.343	16.850	1.00	81.96	O
ATOM	957	NE2	GLN	A	162	32.801	75.298	17.378	1.00	81.19	N
ATOM	958	C	GLN	A	162	30.925	74.083	21.473	1.00	81.66	C
ATOM	959	O	GLN	A	162	31.988	74.525	21.890	1.00	81.94	O
ATOM	960	N	ASP	A	163	29.750	74.455	21.968	1.00	82.84	N
ATOM	961	CA	ASP	A	163	29.651	75.407	23.064	1.00	83.92	C
ATOM	962	CB	ASP	A	163	28.206	75.498	23.578	1.00	83.78	C
ATOM	963	CG	ASP	A	163	27.313	76.377	22.695	1.00	83.72	C
ATOM	964	OD1	ASP	A	163	27.752	76.803	21.609	1.00	83.62	O
ATOM	965	OD2	ASP	A	163	26.148	76.693	23.010	1.00	83.30	O
ATOM	966	C	ASP	A	163	30.603	75.052	24.212	1.00	84.67	C
ATOM	967	O	ASP	A	163	31.190	75.938	24.819	1.00	84.68	O
ATOM	968	N	VAL	A	164	30.749	73.762	24.503	1.00	85.74	N
ATOM	969	CA	VAL	A	164	31.638	73.300	25.567	1.00	86.99	C
ATOM	970	CB	VAL	A	164	31.489	71.794	25.830	1.00	87.12	C
ATOM	971	CG1	VAL	A	164	32.741	71.243	26.520	1.00	86.86	C
ATOM	972	CG2	VAL	A	164	30.255	71.512	26.655	1.00	87.40	C
ATOM	973	C	VAL	A	164	33.095	73.514	25.219	1.00	87.89	C
ATOM	974	O	VAL	A	164	33.902	73.894	26.073	1.00	88.09	O
ATOM	975	N	ALA	A	165	33.434	73.215	23.968	1.00	88.83	N
ATOM	976	CA	ALA	A	165	34.790	73.402	23.471	1.00	89.70	C
ATOM	977	CB	ALA	A	165	34.915	72.855	22.048	1.00	89.73	C
ATOM	978	C	ALA	A	165	35.095	74.893	23.502	1.00	90.11	C
ATOM	979	O	ALA	A	165	35.982	75.345	24.228	1.00	90.25	O
ATOM	980	N	ASP	A	166	34.335	75.644	22.709	1.00	90.59	N
ATOM	981	CA	ASP	A	166	34.395	77.101	22.678	1.00	90.87	C
ATOM	982	CB	ASP	A	166	33.233	77.649	21.857	1.00	91.06	C
ATOM	983	CG	ASP	A	166	33.433	77.454	20.378	1.00	91.81	C
ATOM	984	OD1	ASP	A	166	34.603	77.309	19.952	1.00	93.29	O
ATOM	985	OD2	ASP	A	166	32.487	77.438	19.565	1.00	92.48	O
ATOM	986	C	ASP	A	166	34.373	77.710	24.083	1.00	90.93	C

Figure 2-20

ATOM	987	O	ASP	A	166	34.114	78.898	24.254	1.00	90.91	O
ATOM	988	N	ALA	A	167	34.594	76.860	25.079	1.00	91.01	N
ATOM	989	CA	ALA	A	167	34.799	77.270	26.467	1.00	90.97	C
ATOM	990	CB	ALA	A	167	35.930	78.302	26.549	1.00	91.11	C
ATOM	991	C	ALA	A	167	33.615	77.707	27.337	1.00	90.86	C
ATOM	992	O	ALA	A	167	33.794	77.858	28.547	1.00	90.73	O
ATOM	993	N	LYS	A	168	32.424	77.918	26.782	1.00	90.78	N
ATOM	994	CA	LYS	A	168	31.336	78.330	27.683	1.00	90.66	C
ATOM	995	CB	LYS	A	168	30.554	79.551	27.199	1.00	91.00	C
ATOM	996	CG	LYS	A	168	29.834	80.244	28.371	1.00	91.87	C
ATOM	997	CD	LYS	A	168	30.625	80.052	29.686	1.00	93.42	C
ATOM	998	CE	LYS	A	168	29.856	80.570	30.913	1.00	95.04	C
ATOM	999	NZ	LYS	A	168	30.352	80.036	32.228	1.00	94.12	N
ATOM	1000	C	LYS	A	168	30.393	77.251	28.200	1.00	90.12	C
ATOM	1001	O	LYS	A	168	29.181	77.290	27.998	1.00	90.38	O
ATOM	1002	N	ALA	A	169	30.974	76.300	28.908	1.00	89.22	N
ATOM	1003	CA	ALA	A	169	30.214	75.247	29.531	1.00	88.14	C
ATOM	1004	CB	ALA	A	169	29.304	74.576	28.524	1.00	88.29	C
ATOM	1005	C	ALA	A	169	31.247	74.288	30.047	1.00	87.30	C
ATOM	1006	O	ALA	A	169	32.149	73.897	29.320	1.00	87.17	O
ATOM	1007	N	ASN	A	170	31.156	73.967	31.325	1.00	86.39	N
ATOM	1008	CA	ASN	A	170	32.043	72.985	31.909	1.00	85.64	C
ATOM	1009	CB	ASN	A	170	32.289	73.293	33.390	1.00	86.02	C
ATOM	1010	CG	ASN	A	170	33.497	72.560	33.950	1.00	86.56	C
ATOM	1011	OD1	ASN	A	170	34.546	72.501	33.308	1.00	87.96	O
ATOM	1012	ND2	ASN	A	170	33.360	72.007	35.152	1.00	86.72	N
ATOM	1013	C	ASN	A	170	31.345	71.647	31.765	1.00	84.68	C
ATOM	1014	O	ASN	A	170	30.121	71.561	31.895	1.00	84.73	O
ATOM	1015	N	PRO	A	171	32.100	70.606	31.451	1.00	83.44	N
ATOM	1016	CA	PRO	A	171	31.523	69.266	31.352	1.00	82.22	C
ATOM	1017	CB	PRO	A	171	32.762	68.370	31.260	1.00	82.41	C
ATOM	1018	CG	PRO	A	171	33.883	69.264	31.721	1.00	82.97	C
ATOM	1019	CD	PRO	A	171	33.536	70.603	31.138	1.00	83.43	C
ATOM	1020	C	PRO	A	171	30.719	68.961	32.617	1.00	80.56	C
ATOM	1021	O	PRO	A	171	29.566	68.566	32.527	1.00	80.72	O
ATOM	1022	N	GLY	A	172	31.325	69.165	33.782	1.00	78.85	N
ATOM	1023	CA	GLY	A	172	30.669	68.907	35.051	1.00	76.11	C
ATOM	1024	C	GLY	A	172	29.393	69.714	35.165	1.00	74.27	C
ATOM	1025	O	GLY	A	172	28.609	69.532	36.100	1.00	74.45	O
ATOM	1026	N	ASP	A	173	29.183	70.603	34.198	1.00	71.89	N
ATOM	1027	CA	ASP	A	173	28.004	71.451	34.161	1.00	69.43	C
ATOM	1028	CB	ASP	A	173	28.412	72.894	33.831	1.00	70.05	C
ATOM	1029	CG	ASP	A	173	28.877	73.683	35.068	1.00	71.23	C
ATOM	1030	OD1	ASP	A	173	29.980	73.409	35.605	1.00	72.32	O
ATOM	1031	OD2	ASP	A	173	28.195	74.606	35.572	1.00	72.07	O
ATOM	1032	C	ASP	A	173	26.980	70.930	33.139	1.00	67.35	C
ATOM	1033	O	ASP	A	173	26.129	71.687	32.646	1.00	67.17	O
ATOM	1034	N	ILE	A	174	27.082	69.640	32.815	1.00	64.27	N
ATOM	1035	CA	ILE	A	174	26.174	68.980	31.860	1.00	61.17	C
ATOM	1036	CB	ILE	A	174	26.948	68.095	30.864	1.00	61.72	C
ATOM	1037	CG1	ILE	A	174	27.296	68.897	29.608	1.00	61.33	C
ATOM	1038	CD1	ILE	A	174	28.355	68.238	28.756	1.00	62.04	C
ATOM	1039	CG2	ILE	A	174	26.147	66.817	30.515	1.00	60.92	C
ATOM	1040	C	ILE	A	174	25.128	68.148	32.577	1.00	58.64	C
ATOM	1041	O	ILE	A	174	25.447	67.199	33.307	1.00	58.26	O
ATOM	1042	N	THR	A	175	23.875	68.521	32.370	1.00	55.50	N
ATOM	1043	CA	THR	A	175	22.774	67.863	33.037	1.00	52.96	C

Figure 2-21

ATOM	1044	CB	THR	A	175	22.325	68.690	34.251	1.00	52.53	C
ATOM	1045	OG1	THR	A	175	21.797	69.949	33.810	1.00	50.00	O
ATOM	1046	CG2	THR	A	175	23.513	69.077	35.093	1.00	52.68	C
ATOM	1047	C	THR	A	175	21.583	67.677	32.118	1.00	51.81	C
ATOM	1048	O	THR	A	175	21.516	68.233	31.024	1.00	51.04	O
ATOM	1049	N	GLU	A	176	20.622	66.913	32.606	1.00	50.94	N
ATOM	1050	CA	GLU	A	176	19.393	66.695	31.890	1.00	50.39	C
ATOM	1051	CB	GLU	A	176	18.436	65.913	32.765	1.00	50.01	C
ATOM	1052	CG	GLU	A	176	18.884	64.499	33.091	1.00	48.12	C
ATOM	1053	CD	GLU	A	176	17.765	63.718	33.757	1.00	45.44	C
ATOM	1054	OE1	GLU	A	176	18.027	62.738	34.475	1.00	41.04	O
ATOM	1055	OE2	GLU	A	176	16.610	64.124	33.565	1.00	46.16	O
ATOM	1056	C	GLU	A	176	18.763	68.029	31.548	1.00	51.01	C
ATOM	1057	O	GLU	A	176	18.279	68.241	30.436	1.00	50.70	O
ATOM	1058	N	GLU	A	177	18.770	68.927	32.524	1.00	51.59	N
ATOM	1059	CA	GLU	A	177	18.169	70.240	32.376	1.00	52.81	C
ATOM	1060	CB	GLU	A	177	18.287	71.011	33.696	1.00	53.47	C
ATOM	1061	CG	GLU	A	177	17.768	70.254	34.925	1.00	57.74	C
ATOM	1062	CD	GLU	A	177	18.803	69.372	35.638	1.00	61.44	C
ATOM	1063	OE1	GLU	A	177	18.844	68.151	35.377	1.00	60.21	O
ATOM	1064	OE2	GLU	A	177	19.553	69.893	36.514	1.00	66.62	O
ATOM	1065	C	GLU	A	177	18.881	70.982	31.256	1.00	52.57	C
ATOM	1066	O	GLU	A	177	18.267	71.714	30.466	1.00	52.14	O
ATOM	1067	N	LEU	A	178	20.190	70.768	31.193	1.00	52.36	N
ATOM	1068	CA	LEU	A	178	21.022	71.374	30.175	1.00	52.36	C
ATOM	1069	CB	LEU	A	178	22.500	71.000	30.428	1.00	52.64	C
ATOM	1070	CG	LEU	A	178	23.645	71.893	29.938	1.00	54.27	C
ATOM	1071	CD1	LEU	A	178	24.801	71.059	29.375	1.00	54.27	C
ATOM	1072	CD2	LEU	A	178	23.200	72.952	28.916	1.00	54.38	C
ATOM	1073	C	LEU	A	178	20.571	70.845	28.803	1.00	51.39	C
ATOM	1074	O	LEU	A	178	20.245	71.622	27.901	1.00	51.49	O
ATOM	1075	N	ILE	A	179	20.535	69.526	28.653	1.00	50.04	N
ATOM	1076	CA	ILE	A	179	20.219	68.943	27.353	1.00	48.69	C
ATOM	1077	CB	ILE	A	179	20.333	67.404	27.419	1.00	48.44	C
ATOM	1078	CG1	ILE	A	179	21.808	67.026	27.568	1.00	45.09	C
ATOM	1079	CD1	ILE	A	179	22.062	65.590	27.769	1.00	41.60	C
ATOM	1080	CG2	ILE	A	179	19.785	66.744	26.177	1.00	46.81	C
ATOM	1081	C	ILE	A	179	18.882	69.470	26.833	1.00	49.66	C
ATOM	1082	O	ILE	A	179	18.775	69.887	25.669	1.00	48.98	O
ATOM	1083	N	GLY	A	180	17.896	69.526	27.735	1.00	50.36	N
ATOM	1084	CA	GLY	A	180	16.568	70.037	27.440	1.00	50.34	C
ATOM	1085	C	GLY	A	180	16.597	71.355	26.709	1.00	50.91	C
ATOM	1086	O	GLY	A	180	15.848	71.586	25.761	1.00	50.98	O
ATOM	1087	N	ASN	A	181	17.492	72.227	27.130	1.00	51.52	N
ATOM	1088	CA	ASN	A	181	17.603	73.538	26.518	1.00	52.09	C
ATOM	1089	CB	ASN	A	181	18.395	74.476	27.428	1.00	52.85	C
ATOM	1090	CG	ASN	A	181	17.627	74.849	28.673	1.00	53.84	C
ATOM	1091	OD1	ASN	A	181	16.467	75.278	28.594	1.00	56.95	O
ATOM	1092	ND2	ASN	A	181	18.252	74.674	29.827	1.00	53.31	N
ATOM	1093	C	ASN	A	181	18.200	73.548	25.118	1.00	51.94	C
ATOM	1094	O	ASN	A	181	18.217	74.577	24.467	1.00	51.91	O
ATOM	1095	N	TYR	A	182	18.676	72.404	24.646	1.00	52.03	N
ATOM	1096	CA	TYR	A	182	19.300	72.364	23.337	1.00	51.87	C
ATOM	1097	CB	TYR	A	182	20.725	71.835	23.436	1.00	52.56	C
ATOM	1098	CG	TYR	A	182	21.741	72.831	23.967	1.00	53.98	C
ATOM	1099	CD1	TYR	A	182	22.124	72.830	25.301	1.00	54.26	C
ATOM	1100	CE1	TYR	A	182	23.081	73.725	25.777	1.00	54.85	C

Figure 2-22

ATOM	1101	CZ	TYR	A	182	23.658	74.637	24.918	1.00	56.05	C
ATOM	1102	OH	TYR	A	182	24.615	75.533	25.370	1.00	56.06	O
ATOM	1103	CE2	TYR	A	182	23.295	74.647	23.589	1.00	56.50	C
ATOM	1104	CD2	TYR	A	182	22.348	73.745	23.122	1.00	55.59	C
ATOM	1105	C	TYR	A	182	18.472	71.550	22.354	1.00	51.11	C
ATOM	1106	O	TYR	A	182	18.797	71.465	21.174	1.00	50.54	O
ATOM	1107	N	LEU	A	183	17.401	70.950	22.855	1.00	50.32	N
ATOM	1108	CA	LEU	A	183	16.461	70.218	22.009	1.00	49.76	C
ATOM	1109	CB	LEU	A	183	15.601	69.301	22.873	1.00	49.27	C
ATOM	1110	CG	LEU	A	183	16.372	68.349	23.790	1.00	49.01	C
ATOM	1111	CD1	LEU	A	183	15.433	67.684	24.790	1.00	45.31	C
ATOM	1112	CD2	LEU	A	183	17.139	67.294	22.983	1.00	47.19	C
ATOM	1113	C	LEU	A	183	15.547	71.191	21.213	1.00	49.44	C
ATOM	1114	O	LEU	A	183	15.263	72.306	21.651	1.00	48.56	O
ATOM	1115	N	PHE	A	184	15.097	70.761	20.049	1.00	49.01	N
ATOM	1116	CA	PHE	A	184	14.236	71.580	19.234	1.00	49.67	C
ATOM	1117	CB	PHE	A	184	13.773	70.805	18.006	1.00	49.94	C
ATOM	1118	CG	PHE	A	184	14.886	70.386	17.089	1.00	50.80	C
ATOM	1119	CD1	PHE	A	184	14.769	69.240	16.324	1.00	50.31	C
ATOM	1120	CE1	PHE	A	184	15.775	68.845	15.473	1.00	50.18	C
ATOM	1121	CZ	PHE	A	184	16.908	69.589	15.373	1.00	51.45	C
ATOM	1122	CE2	PHE	A	184	17.046	70.743	16.127	1.00	52.13	C
ATOM	1123	CD2	PHE	A	184	16.038	71.135	16.984	1.00	51.18	C
ATOM	1124	C	PHE	A	184	13.010	72.103	19.984	1.00	50.18	C
ATOM	1125	O	PHE	A	184	12.378	73.052	19.530	1.00	50.01	O
ATOM	1126	N	THR	A	185	12.646	71.486	21.104	1.00	50.63	N
ATOM	1127	CA	THR	A	185	11.508	71.984	21.865	1.00	51.12	C
ATOM	1128	CB	THR	A	185	10.824	70.867	22.651	1.00	50.76	C
ATOM	1129	OG1	THR	A	185	11.801	69.931	23.102	1.00	50.36	O
ATOM	1130	CG2	THR	A	185	9.925	70.055	21.759	1.00	51.08	C
ATOM	1131	C	THR	A	185	11.881	73.069	22.861	1.00	52.21	C
ATOM	1132	O	THR	A	185	11.062	73.435	23.690	1.00	52.62	O
ATOM	1133	N	GLN	A	186	13.105	73.574	22.812	1.00	53.06	N
ATOM	1134	CA	GLN	A	186	13.519	74.586	23.773	1.00	54.50	C
ATOM	1135	CB	GLN	A	186	15.002	74.881	23.597	1.00	54.23	C
ATOM	1136	CG	GLN	A	186	15.275	75.603	22.297	1.00	55.92	C
ATOM	1137	CD	GLN	A	186	16.724	75.964	22.116	1.00	57.70	C
ATOM	1138	OE1	GLN	A	186	17.225	75.969	20.998	1.00	59.85	O
ATOM	1139	NE2	GLN	A	186	17.399	76.289	23.208	1.00	59.58	N
ATOM	1140	C	GLN	A	186	12.717	75.909	23.677	1.00	55.24	C
ATOM	1141	O	GLN	A	186	12.458	76.571	24.686	1.00	54.42	O
ATOM	1142	N	HIS	A	187	12.329	76.279	22.466	1.00	56.38	N
ATOM	1143	CA	HIS	A	187	11.642	77.547	22.244	1.00	58.08	C
ATOM	1144	CB	HIS	A	187	11.748	77.976	20.777	1.00	58.93	C
ATOM	1145	CG	HIS	A	187	13.153	78.057	20.262	1.00	61.48	C
ATOM	1146	ND1	HIS	A	187	13.550	77.452	19.088	1.00	63.40	N
ATOM	1147	CE1	HIS	A	187	14.829	77.709	18.871	1.00	65.48	C
ATOM	1148	NE2	HIS	A	187	15.276	78.465	19.860	1.00	65.59	N
ATOM	1149	CD2	HIS	A	187	14.247	78.697	20.743	1.00	65.08	C
ATOM	1150	C	HIS	A	187	10.178	77.516	22.674	1.00	58.21	C
ATOM	1151	O	HIS	A	187	9.369	78.355	22.242	1.00	58.20	O
ATOM	1152	N	LEU	A	188	9.830	76.527	23.495	1.00	57.94	N
ATOM	1153	CA	LEU	A	188	8.510	76.475	24.087	1.00	57.63	C
ATOM	1154	CB	LEU	A	188	7.982	75.042	24.162	1.00	57.61	C
ATOM	1155	CG	LEU	A	188	7.545	74.397	22.848	1.00	58.58	C
ATOM	1156	CD1	LEU	A	188	7.044	72.997	23.091	1.00	58.90	C
ATOM	1157	CD2	LEU	A	188	6.468	75.228	22.151	1.00	57.38	C

Figure 2-23

ATOM	1158	C	LEU A 188	8.767	76.989	25.472	1.00	57.24	C
ATOM	1159	O	LEU A 188	9.872	76.835	25.978	1.00	57.67	O
ATOM	1160	N	PRO A 189	7.787	77.638	26.079	1.00	57.01	N
ATOM	1161	CA	PRO A 189	7.923	78.082	27.472	1.00	56.58	C
ATOM	1162	CB	PRO A 189	6.480	78.309	27.887	1.00	56.83	C
ATOM	1163	CG	PRO A 189	5.841	78.807	26.591	1.00	56.88	C
ATOM	1164	CD	PRO A 189	6.496	78.030	25.489	1.00	56.86	C
ATOM	1165	C	PRO A 189	8.588	76.981	28.297	1.00	56.07	C
ATOM	1166	O	PRO A 189	8.499	75.815	27.937	1.00	55.62	O
ATOM	1167	N	LYS A 190	9.237	77.353	29.392	1.00	55.65	N
ATOM	1168	CA	LYS A 190	10.050	76.415	30.151	1.00	54.78	C
ATOM	1169	CB	LYS A 190	11.035	77.159	31.054	1.00	55.37	C
ATOM	1170	CG	LYS A 190	12.466	77.097	30.552	1.00	56.48	C
ATOM	1171	CD	LYS A 190	13.400	76.547	31.616	1.00	57.01	C
ATOM	1172	CE	LYS A 190	14.855	76.665	31.180	1.00	58.90	C
ATOM	1173	NZ	LYS A 190	15.814	76.042	32.157	1.00	57.36	N
ATOM	1174	C	LYS A 190	9.389	75.292	30.950	1.00	53.90	C
ATOM	1175	O	LYS A 190	10.084	74.598	31.682	1.00	54.58	O
ATOM	1176	N	ASP A 191	8.089	75.083	30.828	1.00	52.07	N
ATOM	1177	CA	ASP A 191	7.470	73.977	31.563	1.00	50.51	C
ATOM	1178	CB	ASP A 191	6.936	74.448	32.900	1.00	51.96	C
ATOM	1179	CG	ASP A 191	5.969	75.604	32.753	1.00	54.24	C
ATOM	1180	OD1	ASP A 191	5.740	76.063	31.607	1.00	55.99	O
ATOM	1181	OD2	ASP A 191	5.420	76.146	33.731	1.00	58.63	O
ATOM	1182	C	ASP A 191	6.330	73.359	30.767	1.00	48.38	C
ATOM	1183	O	ASP A 191	5.453	72.694	31.313	1.00	46.95	O
ATOM	1184	N	LEU A 192	6.361	73.614	29.471	1.00	46.10	N
ATOM	1185	CA	LEU A 192	5.420	73.042	28.546	1.00	45.10	C
ATOM	1186	CB	LEU A 192	4.590	74.154	27.922	1.00	44.55	C
ATOM	1187	CG	LEU A 192	3.807	74.847	29.025	1.00	45.12	C
ATOM	1188	CD1	LEU A 192	3.248	76.161	28.536	1.00	45.24	C
ATOM	1189	CD2	LEU A 192	2.711	73.929	29.588	1.00	43.74	C
ATOM	1190	C	LEU A 192	6.211	72.289	27.484	1.00	43.58	C
ATOM	1191	O	LEU A 192	5.708	71.974	26.431	1.00	43.33	O
ATOM	1192	N	ARG A 193	7.472	72.026	27.778	1.00	42.36	N
ATOM	1193	CA	ARG A 193	8.351	71.330	26.839	1.00	41.33	C
ATOM	1194	CB	ARG A 193	9.813	71.609	27.186	1.00	41.49	C
ATOM	1195	CG	ARG A 193	10.242	73.021	26.832	1.00	40.87	C
ATOM	1196	CD	ARG A 193	11.539	73.452	27.500	1.00	45.17	C
ATOM	1197	NE	ARG A 193	12.108	74.668	26.929	1.00	46.19	N
ATOM	1198	CZ	ARG A 193	13.302	75.139	27.252	1.00	47.06	C
ATOM	1199	NH1	ARG A 193	14.039	74.501	28.143	1.00	47.88	N
ATOM	1200	NH2	ARG A 193	13.767	76.243	26.686	1.00	47.28	N
ATOM	1201	C	ARG A 193	8.066	69.817	26.683	1.00	39.92	C
ATOM	1202	O	ARG A 193	8.121	69.289	25.565	1.00	40.65	O
ATOM	1203	N	ASP A 194	7.674	69.150	27.759	1.00	37.08	N
ATOM	1204	CA	ASP A 194	7.382	67.730	27.684	1.00	35.98	C
ATOM	1205	CB	ASP A 194	7.823	66.999	28.963	1.00	35.41	C
ATOM	1206	CG	ASP A 194	9.312	67.114	29.247	1.00	34.90	C
ATOM	1207	OD1	ASP A 194	10.092	67.676	28.442	1.00	28.44	O
ATOM	1208	OD2	ASP A 194	9.766	66.642	30.307	1.00	38.51	O
ATOM	1209	C	ASP A 194	5.912	67.393	27.494	1.00	35.12	C
ATOM	1210	O	ASP A 194	5.075	67.727	28.314	1.00	34.80	O
ATOM	1211	N	PRO A 195	5.621	66.631	26.459	1.00	34.24	N
ATOM	1212	CA	PRO A 195	4.246	66.184	26.201	1.00	33.46	C
ATOM	1213	CB	PRO A 195	4.420	65.111	25.124	1.00	33.67	C
ATOM	1214	CG	PRO A 195	5.787	65.300	24.560	1.00	33.79	C

Figure 2-24

ATOM	1215	CD	PRO	A	195	6.603	66.134	25.480	1.00	33.40	C
ATOM	1216	C	PRO	A	195	3.613	65.562	27.452	1.00	33.15	C
ATOM	1217	O	PRO	A	195	4.215	64.690	28.075	1.00	33.38	O
ATOM	1218	N	ASP	A	196	2.421	65.998	27.833	1.00	32.25	N
ATOM	1219	CA	ASP	A	196	1.757	65.387	28.957	1.00	32.34	C
ATOM	1220	CB	ASP	A	196	0.670	66.328	29.521	1.00	33.18	C
ATOM	1221	CG	ASP	A	196	1.242	67.474	30.309	1.00	34.28	C
ATOM	1222	OD1	ASP	A	196	1.488	67.239	31.519	1.00	35.06	O
ATOM	1223	OD2	ASP	A	196	1.524	68.612	29.815	1.00	34.06	O
ATOM	1224	C	ASP	A	196	1.108	64.127	28.414	1.00	31.58	C
ATOM	1225	O	ASP	A	196	0.925	63.145	29.119	1.00	31.92	O
ATOM	1226	N	LEU	A	197	0.792	64.144	27.132	1.00	31.02	N
ATOM	1227	CA	LEU	A	197	0.047	63.046	26.522	1.00	31.66	C
ATOM	1228	CB	LEU	A	197	-1.456	63.384	26.480	1.00	32.44	C
ATOM	1229	CG	LEU	A	197	-2.344	62.359	25.787	1.00	35.16	C
ATOM	1230	CD1	LEU	A	197	-2.473	61.157	26.716	1.00	34.97	C
ATOM	1231	CD2	LEU	A	197	-3.757	62.925	25.435	1.00	39.31	C
ATOM	1232	C	LEU	A	197	0.455	62.874	25.101	1.00	30.85	C
ATOM	1233	O	LEU	A	197	0.557	63.849	24.359	1.00	30.58	O
ATOM	1234	N	ILE	A	198	0.668	61.627	24.707	1.00	30.29	N
ATOM	1235	CA	ILE	A	198	0.960	61.325	23.325	1.00	29.84	C
ATOM	1236	CB	ILE	A	198	2.315	60.618	23.177	1.00	30.09	C
ATOM	1237	CG1	ILE	A	198	3.443	61.529	23.658	1.00	30.79	C
ATOM	1238	CD1	ILE	A	198	4.824	60.939	23.482	1.00	25.63	C
ATOM	1239	CG2	ILE	A	198	2.555	60.259	21.710	1.00	28.18	C
ATOM	1240	C	ILE	A	198	-0.170	60.477	22.753	1.00	30.42	C
ATOM	1241	O	ILE	A	198	-0.683	59.568	23.416	1.00	30.16	O
ATOM	1242	N	ILE	A	199	-0.573	60.805	21.532	1.00	30.84	N
ATOM	1243	CA	ILE	A	199	-1.623	60.076	20.837	1.00	33.38	C
ATOM	1244	CB	ILE	A	199	-2.804	61.003	20.536	1.00	33.91	C
ATOM	1245	CG1	ILE	A	199	-3.401	61.420	21.891	1.00	37.15	C
ATOM	1246	CD1	ILE	A	199	-4.687	62.109	21.786	1.00	36.23	C
ATOM	1247	CG2	ILE	A	199	-3.839	60.315	19.650	1.00	34.65	C
ATOM	1248	C	ILE	A	199	-1.096	59.560	19.542	1.00	32.57	C
ATOM	1249	O	ILE	A	199	-0.483	60.281	18.782	1.00	32.55	O
ATOM	1250	N	ARG	A	200	-1.341	58.302	19.307	1.00	33.82	N
ATOM	1251	CA	ARG	A	200	-1.000	57.682	18.050	1.00	35.83	C
ATOM	1252	CB	ARG	A	200	-0.083	56.489	18.336	1.00	36.14	C
ATOM	1253	CG	ARG	A	200	0.395	55.735	17.122	1.00	39.67	C
ATOM	1254	CD	ARG	A	200	1.579	56.376	16.468	1.00	45.21	C
ATOM	1255	NE	ARG	A	200	1.984	55.657	15.270	1.00	49.62	N
ATOM	1256	CZ	ARG	A	200	3.183	55.743	14.720	1.00	50.81	C
ATOM	1257	NH1	ARG	A	200	3.464	55.046	13.634	1.00	52.91	N
ATOM	1258	NH2	ARG	A	200	4.101	56.528	15.255	1.00	53.65	N
ATOM	1259	C	ARG	A	200	-2.332	57.183	17.453	1.00	36.24	C
ATOM	1260	O	ARG	A	200	-3.117	56.498	18.101	1.00	35.76	O
ATOM	1261	N	THR	A	201	-2.619	57.554	16.231	1.00	38.12	N
ATOM	1262	CA	THR	A	201	-3.854	57.076	15.649	1.00	39.65	C
ATOM	1263	CB	THR	A	201	-4.507	58.142	14.841	1.00	39.47	C
ATOM	1264	OG1	THR	A	201	-3.523	58.743	14.009	1.00	37.72	O
ATOM	1265	CG2	THR	A	201	-4.977	59.284	15.717	1.00	41.35	C
ATOM	1266	C	THR	A	201	-3.557	55.991	14.674	1.00	40.87	C
ATOM	1267	O	THR	A	201	-2.487	55.998	14.046	1.00	40.84	O
ATOM	1268	N	SER	A	202	-4.517	55.069	14.570	1.00	41.14	N
ATOM	1269	CA	SER	A	202	-4.568	54.108	13.479	1.00	41.79	C
ATOM	1270	CB	SER	A	202	-3.850	54.610	12.237	1.00	41.68	C
ATOM	1271	OG	SER	A	202	-3.650	53.495	11.397	1.00	42.09	O

Figure 2-25

ATOM	1272	C	SER	A	202	-4.116	52.707	13.699	1.00	42.06	C
ATOM	1273	O	SER	A	202	-3.751	52.050	12.738	1.00	42.59	O
ATOM	1274	N	GLY	A	203	-4.180	52.215	14.924	1.00	42.31	N
ATOM	1275	CA	GLY	A	203	-3.752	50.859	15.176	1.00	42.79	C
ATOM	1276	C	GLY	A	203	-2.332	50.836	15.660	1.00	42.98	C
ATOM	1277	O	GLY	A	203	-2.080	50.405	16.772	1.00	44.31	O
ATOM	1278	N	GLU	A	204	-1.413	51.342	14.855	1.00	43.13	N
ATOM	1279	CA	GLU	A	204	0.010	51.346	15.195	1.00	43.55	C
ATOM	1280	CB	GLU	A	204	0.712	52.450	14.416	1.00	44.58	C
ATOM	1281	CG	GLU	A	204	1.274	52.010	13.061	1.00	48.50	C
ATOM	1282	CD	GLU	A	204	0.482	50.893	12.423	1.00	55.54	C
ATOM	1283	OE1	GLU	A	204	1.099	49.858	12.061	1.00	58.96	O
ATOM	1284	OE2	GLU	A	204	-0.759	51.043	12.273	1.00	58.38	O
ATOM	1285	C	GLU	A	204	0.343	51.466	16.680	1.00	41.90	C
ATOM	1286	O	GLU	A	204	0.151	52.491	17.296	1.00	42.34	O
ATOM	1287	N	LEU	A	205	0.826	50.405	17.274	1.00	41.02	N
ATOM	1288	CA	LEU	A	205	1.258	50.512	18.657	1.00	40.90	C
ATOM	1289	CB	LEU	A	205	0.860	49.252	19.401	1.00	40.82	C
ATOM	1290	CG	LEU	A	205	-0.484	49.175	20.110	1.00	43.37	C
ATOM	1291	CD1	LEU	A	205	-0.295	49.460	21.577	1.00	44.91	C
ATOM	1292	CD2	LEU	A	205	-1.545	50.126	19.505	1.00	44.42	C
ATOM	1293	C	LEU	A	205	2.786	50.742	18.725	1.00	40.19	C
ATOM	1294	O	LEU	A	205	3.538	49.819	18.992	1.00	39.68	O
ATOM	1295	N	ARG	A	206	3.234	51.962	18.449	1.00	40.50	N
ATOM	1296	CA	ARG	A	206	4.662	52.278	18.498	1.00	41.64	C
ATOM	1297	CB	ARG	A	206	5.412	51.526	17.379	1.00	41.80	C
ATOM	1298	CG	ARG	A	206	5.158	52.046	15.975	1.00	42.82	C
ATOM	1299	CD	ARG	A	206	5.863	51.270	14.886	1.00	46.98	C
ATOM	1300	NE	ARG	A	206	5.225	51.445	13.586	1.00	51.26	N
ATOM	1301	CZ	ARG	A	206	4.442	50.531	13.006	1.00	51.79	C
ATOM	1302	NH1	ARG	A	206	4.197	49.378	13.625	1.00	53.37	N
ATOM	1303	NH2	ARG	A	206	3.905	50.769	11.815	1.00	48.44	N
ATOM	1304	C	ARG	A	206	4.912	53.788	18.425	1.00	41.76	C
ATOM	1305	O	ARG	A	206	4.104	54.527	17.854	1.00	42.28	O
ATOM	1306	N	LEU	A	207	6.057	54.240	18.941	1.00	41.45	N
ATOM	1307	CA	LEU	A	207	6.317	55.690	19.095	1.00	41.35	C
ATOM	1308	CB	LEU	A	207	7.051	55.957	20.415	1.00	41.96	C
ATOM	1309	CG	LEU	A	207	7.303	57.377	20.929	1.00	45.51	C
ATOM	1310	CD1	LEU	A	207	6.000	58.264	21.132	1.00	44.12	C
ATOM	1311	CD2	LEU	A	207	8.157	57.294	22.229	1.00	46.61	C
ATOM	1312	C	LEU	A	207	7.061	56.361	17.942	1.00	39.57	C
ATOM	1313	O	LEU	A	207	7.145	57.592	17.887	1.00	41.13	O
ATOM	1314	N	SER	A	208	7.567	55.546	17.025	1.00	35.90	N
ATOM	1315	CA	SER	A	208	8.278	55.991	15.833	1.00	33.00	C
ATOM	1316	CB	SER	A	208	7.306	56.267	14.680	1.00	33.40	C
ATOM	1317	OG	SER	A	208	6.349	55.229	14.617	1.00	32.40	O
ATOM	1318	C	SER	A	208	9.287	57.117	15.969	1.00	30.54	C
ATOM	1319	O	SER	A	208	9.359	58.022	15.115	1.00	29.58	O
ATOM	1320	N	ASN	A	209	10.087	57.051	17.018	1.00	28.26	N
ATOM	1321	CA	ASN	A	209	11.195	58.006	17.145	1.00	26.76	C
ATOM	1322	CB	ASN	A	209	12.048	57.952	15.873	1.00	25.07	C
ATOM	1323	CG	ASN	A	209	13.385	58.631	16.018	1.00	23.14	C
ATOM	1324	OD1	ASN	A	209	13.837	58.894	17.111	1.00	20.08	O
ATOM	1325	ND2	ASN	A	209	14.053	58.879	14.880	1.00	16.12	N
ATOM	1326	C	ASN	A	209	10.561	59.390	17.326	1.00	26.01	C
ATOM	1327	O	ASN	A	209	11.170	60.421	17.011	1.00	25.07	O
ATOM	1328	N	PHE	A	210	9.307	59.392	17.764	1.00	24.07	N

Figure 2-26

ATOM	1329	CA	PHE	A	210	8.661	60.652	18.133	1.00	24.91	C
ATOM	1330	CB	PHE	A	210	7.176	60.612	17.811	1.00	25.65	C
ATOM	1331	CG	PHE	A	210	6.465	61.903	18.090	1.00	24.28	C
ATOM	1332	CD1	PHE	A	210	5.510	61.978	19.058	1.00	28.38	C
ATOM	1333	CE1	PHE	A	210	4.841	63.196	19.295	1.00	29.51	C
ATOM	1334	CZ	PHE	A	210	5.156	64.317	18.529	1.00	29.49	C
ATOM	1335	CE2	PHE	A	210	6.139	64.235	17.590	1.00	27.27	C
ATOM	1336	CD2	PHE	A	210	6.770	63.037	17.372	1.00	25.31	C
ATOM	1337	C	PHE	A	210	8.861	61.060	19.643	1.00	23.78	C
ATOM	1338	O	PHE	A	210	8.388	60.386	20.573	1.00	24.05	O
ATOM	1339	N	LEU	A	211	9.560	62.180	19.844	1.00	23.87	N
ATOM	1340	CA	LEU	A	211	9.863	62.794	21.182	1.00	24.02	C
ATOM	1341	CB	LEU	A	211	8.655	63.624	21.691	1.00	24.63	C
ATOM	1342	CG	LEU	A	211	8.102	64.787	20.799	1.00	24.70	C
ATOM	1343	CD1	LEU	A	211	6.753	65.347	21.321	1.00	24.39	C
ATOM	1344	CD2	LEU	A	211	9.105	65.923	20.680	1.00	17.07	C
ATOM	1345	C	LEU	A	211	10.417	61.899	22.320	1.00	24.31	C
ATOM	1346	O	LEU	A	211	10.044	62.057	23.498	1.00	24.64	O
ATOM	1347	N	PRO	A	212	11.361	61.011	21.991	1.00	23.36	N
ATOM	1348	CA	PRO	A	212	11.924	60.048	22.950	1.00	22.52	C
ATOM	1349	CB	PRO	A	212	13.141	59.474	22.190	1.00	23.12	C
ATOM	1350	CG	PRO	A	212	13.378	60.473	21.138	1.00	24.91	C
ATOM	1351	CD	PRO	A	212	11.990	60.866	20.657	1.00	23.26	C
ATOM	1352	C	PRO	A	212	12.351	60.706	24.254	1.00	22.47	C
ATOM	1353	O	PRO	A	212	12.033	60.195	25.327	1.00	22.14	O
ATOM	1354	N	TRP	A	213	13.059	61.824	24.177	1.00	21.93	N
ATOM	1355	CA	TRP	A	213	13.452	62.530	25.411	1.00	23.28	C
ATOM	1356	CB	TRP	A	213	14.605	63.499	25.148	1.00	22.63	C
ATOM	1357	CG	TRP	A	213	15.036	64.324	26.360	1.00	24.91	C
ATOM	1358	CD1	TRP	A	213	14.334	65.335	26.956	1.00	25.62	C
ATOM	1359	NE1	TRP	A	213	15.045	65.847	28.013	1.00	25.29	N
ATOM	1360	CE2	TRP	A	213	16.242	65.196	28.105	1.00	24.19	C
ATOM	1361	CD2	TRP	A	213	16.286	64.250	27.064	1.00	25.75	C
ATOM	1362	CE3	TRP	A	213	17.416	63.433	26.958	1.00	27.86	C
ATOM	1363	CZ3	TRP	A	213	18.468	63.626	27.850	1.00	28.30	C
ATOM	1364	CH2	TRP	A	213	18.394	64.593	28.849	1.00	24.17	C
ATOM	1365	CZ2	TRP	A	213	17.293	65.389	28.985	1.00	23.79	C
ATOM	1366	C	TRP	A	213	12.259	63.260	26.126	1.00	23.19	C
ATOM	1367	O	TRP	A	213	11.871	62.892	27.241	1.00	23.43	O
ATOM	1368	N	GLN	A	214	11.685	64.245	25.458	1.00	21.33	N
ATOM	1369	CA	GLN	A	214	10.569	64.977	26.028	1.00	22.86	C
ATOM	1370	CB	GLN	A	214	10.076	66.082	25.057	1.00	22.37	C
ATOM	1371	CG	GLN	A	214	11.207	66.969	24.512	1.00	26.97	C
ATOM	1372	CD	GLN	A	214	11.821	66.507	23.177	1.00	29.96	C
ATOM	1373	OE1	GLN	A	214	12.155	67.342	22.325	1.00	32.20	O
ATOM	1374	NE2	GLN	A	214	11.951	65.186	22.985	1.00	29.88	N
ATOM	1375	C	GLN	A	214	9.418	64.067	26.568	1.00	21.76	C
ATOM	1376	O	GLN	A	214	8.922	64.321	27.657	1.00	20.99	O
ATOM	1377	N	GLY	A	215	9.148	62.949	25.887	1.00	21.52	N
ATOM	1378	CA	GLY	A	215	8.078	62.016	26.215	1.00	20.18	C
ATOM	1379	C	GLY	A	215	8.360	60.786	27.022	1.00	21.07	C
ATOM	1380	O	GLY	A	215	7.516	59.901	27.097	1.00	20.90	O
ATOM	1381	N	ALA	A	216	9.518	60.766	27.671	1.00	22.72	N
ATOM	1382	CA	ALA	A	216	9.941	59.678	28.546	1.00	23.81	C
ATOM	1383	CB	ALA	A	216	11.235	60.087	29.242	1.00	23.49	C
ATOM	1384	C	ALA	A	216	8.906	59.309	29.597	1.00	25.18	C
ATOM	1385	O	ALA	A	216	8.872	58.167	30.077	1.00	25.53	O

Figure 2-27

ATOM	1386	N	TYR	A	217	8.098	60.290	30.002	1.00	26.09	N
ATOM	1387	CA	TYR	A	217	7.133	60.110	31.087	1.00	27.12	C
ATOM	1388	CB	TYR	A	217	7.407	61.138	32.176	1.00	27.37	C
ATOM	1389	CG	TYR	A	217	8.647	60.841	33.000	1.00	29.42	C
ATOM	1390	CD1	TYR	A	217	8.696	59.759	33.864	1.00	32.74	C
ATOM	1391	CE1	TYR	A	217	9.846	59.472	34.558	1.00	34.23	C
ATOM	1392	CZ	TYR	A	217	10.958	60.273	34.386	1.00	33.31	C
ATOM	1393	OH	TYR	A	217	12.119	60.031	35.058	1.00	32.64	O
ATOM	1394	CE2	TYR	A	217	10.932	61.335	33.527	1.00	32.62	C
ATOM	1395	CD2	TYR	A	217	9.792	61.602	32.827	1.00	31.67	C
ATOM	1396	C	TYR	A	217	5.677	60.268	30.671	1.00	28.34	C
ATOM	1397	O	TYR	A	217	4.782	60.153	31.507	1.00	28.04	O
ATOM	1398	N	SER	A	218	5.423	60.535	29.403	1.00	29.38	N
ATOM	1399	CA	SER	A	218	4.059	60.839	29.003	1.00	30.63	C
ATOM	1400	CB	SER	A	218	4.048	61.464	27.601	1.00	30.96	C
ATOM	1401	OG	SER	A	218	5.190	62.281	27.339	1.00	29.10	O
ATOM	1402	C	SER	A	218	3.074	59.661	29.046	1.00	32.21	C
ATOM	1403	O	SER	A	218	3.447	58.500	28.930	1.00	31.74	O
ATOM	1404	N	GLU	A	219	1.803	59.988	29.237	1.00	33.91	N
ATOM	1405	CA	GLU	A	219	0.734	59.017	29.100	1.00	35.34	C
ATOM	1406	CB	GLU	A	219	-0.584	59.635	29.567	1.00	35.85	C
ATOM	1407	CG	GLU	A	219	-0.666	59.843	31.049	1.00	36.42	C
ATOM	1408	CD	GLU	A	219	-0.539	58.535	31.749	1.00	38.14	C
ATOM	1409	OE1	GLU	A	219	-1.005	57.531	31.158	1.00	41.73	O
ATOM	1410	OE2	GLU	A	219	0.028	58.506	32.860	1.00	38.23	O
ATOM	1411	C	GLU	A	219	0.629	58.766	27.603	1.00	35.45	C
ATOM	1412	O	GLU	A	219	0.712	59.683	26.823	1.00	36.00	O
ATOM	1413	N	LEU	A	220	0.454	57.530	27.202	1.00	36.38	N
ATOM	1414	CA	LEU	A	220	0.301	57.227	25.791	1.00	38.07	C
ATOM	1415	CB	LEU	A	220	1.180	56.022	25.417	1.00	37.32	C
ATOM	1416	CG	LEU	A	220	2.662	56.178	25.771	1.00	37.89	C
ATOM	1417	CD1	LEU	A	220	3.427	54.875	25.530	1.00	36.65	C
ATOM	1418	CD2	LEU	A	220	3.313	57.360	25.009	1.00	34.36	C
ATOM	1419	C	LEU	A	220	-1.174	56.919	25.510	1.00	38.89	C
ATOM	1420	O	LEU	A	220	-1.836	56.311	26.325	1.00	38.06	O
ATOM	1421	N	TYR	A	221	-1.689	57.374	24.375	1.00	40.70	N
ATOM	1422	CA	TYR	A	221	-3.068	57.072	24.008	1.00	42.42	C
ATOM	1423	CB	TYR	A	221	-3.981	58.325	24.057	1.00	43.49	C
ATOM	1424	CG	TYR	A	221	-5.439	57.986	23.756	1.00	45.74	C
ATOM	1425	CD1	TYR	A	221	-6.127	57.102	24.565	1.00	48.46	C
ATOM	1426	CE1	TYR	A	221	-7.420	56.743	24.312	1.00	50.16	C
ATOM	1427	CZ	TYR	A	221	-8.073	57.246	23.213	1.00	51.20	C
ATOM	1428	OH	TYR	A	221	-9.376	56.841	22.994	1.00	51.07	O
ATOM	1429	CE2	TYR	A	221	-7.425	58.127	22.364	1.00	50.66	C
ATOM	1430	CD2	TYR	A	221	-6.088	58.483	22.639	1.00	48.40	C
ATOM	1431	C	TYR	A	221	-3.069	56.450	22.626	1.00	42.72	C
ATOM	1432	O	TYR	A	221	-2.634	57.064	21.673	1.00	43.17	O
ATOM	1433	N	PHE	A	222	-3.494	55.201	22.516	1.00	43.87	N
ATOM	1434	CA	PHE	A	222	-3.616	54.590	21.199	1.00	45.31	C
ATOM	1435	CB	PHE	A	222	-2.871	53.258	21.149	1.00	44.65	C
ATOM	1436	CG	PHE	A	222	-1.416	53.379	21.494	1.00	43.60	C
ATOM	1437	CD1	PHE	A	222	-0.489	53.720	20.519	1.00	42.54	C
ATOM	1438	CE1	PHE	A	222	0.848	53.841	20.824	1.00	38.94	C
ATOM	1439	CZ	PHE	A	222	1.266	53.635	22.120	1.00	39.59	C
ATOM	1440	CE2	PHE	A	222	0.349	53.290	23.102	1.00	40.27	C
ATOM	1441	CD2	PHE	A	222	-0.977	53.181	22.793	1.00	40.79	C
ATOM	1442	C	PHE	A	222	-5.084	54.397	20.792	1.00	46.48	C

Figure 2-28

ATOM	1443	O	PHE	A	222	-5.918	53.947	21.589	1.00	47.68	O
ATOM	1444	N	THR	A	223	-5.407	54.755	19.561	1.00	47.30	N
ATOM	1445	CA	THR	A	223	-6.740	54.491	19.062	1.00	48.20	C
ATOM	1446	CB	THR	A	223	-7.621	55.745	19.054	1.00	48.27	C
ATOM	1447	OG1	THR	A	223	-8.991	55.319	19.069	1.00	49.24	O
ATOM	1448	CG2	THR	A	223	-7.494	56.452	17.731	1.00	46.85	C
ATOM	1449	C	THR	A	223	-6.704	53.917	17.665	1.00	48.78	C
ATOM	1450	O	THR	A	223	-5.928	54.360	16.810	1.00	48.06	O
ATOM	1451	N	ASP	A	224	-7.595	52.958	17.433	1.00	49.98	N
ATOM	1452	CA	ASP	A	224	-7.698	52.323	16.134	1.00	51.09	C
ATOM	1453	CB	ASP	A	224	-8.685	51.162	16.186	1.00	51.98	C
ATOM	1454	CG	ASP	A	224	-8.004	49.808	16.496	1.00	54.61	C
ATOM	1455	OD1	ASP	A	224	-6.755	49.680	16.333	1.00	54.41	O
ATOM	1456	OD2	ASP	A	224	-8.663	48.812	16.899	1.00	56.05	O
ATOM	1457	C	ASP	A	224	-8.097	53.314	15.048	1.00	51.36	C
ATOM	1458	O	ASP	A	224	-7.691	53.155	13.904	1.00	50.85	O
ATOM	1459	N	THR	A	225	-8.846	54.360	15.409	1.00	52.00	N
ATOM	1460	CA	THR	A	225	-9.364	55.282	14.400	1.00	52.31	C
ATOM	1461	CB	THR	A	225	-10.535	56.255	14.927	1.00	52.49	C
ATOM	1462	OG1	THR	A	225	-10.136	57.639	14.928	1.00	50.23	O
ATOM	1463	CG2	THR	A	225	-10.970	55.923	16.355	1.00	51.08	C
ATOM	1464	C	THR	A	225	-8.288	56.002	13.622	1.00	53.04	C
ATOM	1465	O	THR	A	225	-7.270	56.404	14.158	1.00	53.41	O
ATOM	1466	N	LEU	A	226	-8.554	56.141	12.334	1.00	53.82	N
ATOM	1467	CA	LEU	A	226	-7.693	56.804	11.390	1.00	54.63	C
ATOM	1468	CB	LEU	A	226	-8.271	56.642	9.996	1.00	55.24	C
ATOM	1469	CG	LEU	A	226	-7.983	55.350	9.238	1.00	56.21	C
ATOM	1470	CD1	LEU	A	226	-6.924	55.657	8.223	1.00	55.92	C
ATOM	1471	CD2	LEU	A	226	-7.545	54.203	10.159	1.00	58.88	C
ATOM	1472	C	LEU	A	226	-7.684	58.251	11.718	1.00	55.31	C
ATOM	1473	O	LEU	A	226	-8.649	58.745	12.312	1.00	56.41	O
ATOM	1474	N	TRP	A	227	-6.646	58.951	11.257	1.00	55.51	N
ATOM	1475	CA	TRP	A	227	-6.406	60.362	11.610	1.00	55.71	C
ATOM	1476	CB	TRP	A	227	-5.086	60.849	11.021	1.00	55.04	C
ATOM	1477	CG	TRP	A	227	-4.893	62.316	11.189	1.00	54.22	C
ATOM	1478	CD1	TRP	A	227	-4.592	63.216	10.229	1.00	54.54	C
ATOM	1479	NE1	TRP	A	227	-4.474	64.476	10.770	1.00	54.50	N
ATOM	1480	CE2	TRP	A	227	-4.737	64.405	12.111	1.00	53.91	C
ATOM	1481	CD2	TRP	A	227	-5.004	63.060	12.410	1.00	53.55	C
ATOM	1482	CE3	TRP	A	227	-5.279	62.720	13.729	1.00	52.20	C
ATOM	1483	CZ3	TRP	A	227	-5.275	63.713	14.688	1.00	53.39	C
ATOM	1484	CH2	TRP	A	227	-5.009	65.029	14.356	1.00	53.94	C
ATOM	1485	CZ2	TRP	A	227	-4.748	65.400	13.075	1.00	54.38	C
ATOM	1486	C	TRP	A	227	-7.475	61.320	11.167	1.00	56.84	C
ATOM	1487	O	TRP	A	227	-7.937	62.203	11.872	1.00	56.66	O
ATOM	1488	N	PRO	A	228	-7.813	61.121	9.920	1.00	58.19	N
ATOM	1489	CA	PRO	A	228	-8.774	61.933	9.179	1.00	58.64	C
ATOM	1490	CB	PRO	A	228	-8.836	61.235	7.835	1.00	58.84	C
ATOM	1491	CG	PRO	A	228	-7.557	60.481	7.771	1.00	59.48	C
ATOM	1492	CD	PRO	A	228	-7.282	60.001	9.139	1.00	58.57	C
ATOM	1493	C	PRO	A	228	-10.080	61.783	9.904	1.00	58.50	C
ATOM	1494	O	PRO	A	228	-10.803	62.729	10.084	1.00	58.49	O
ATOM	1495	N	ASP	A	229	-10.375	60.578	10.351	1.00	59.21	N
ATOM	1496	CA	ASP	A	229	-11.582	60.388	11.123	1.00	59.08	C
ATOM	1497	CB	ASP	A	229	-11.902	58.901	11.221	1.00	59.82	C
ATOM	1498	CG	ASP	A	229	-12.954	58.479	10.233	1.00	60.49	C
ATOM	1499	OD1	ASP	A	229	-13.666	59.383	9.760	1.00	61.52	O

Figure 2-29

ATOM	1500	OD2	ASP	A	229	-13.145	57.292	9.882	1.00	60.81	O
ATOM	1501	C	ASP	A	229	-11.493	60.986	12.540	1.00	59.08	C
ATOM	1502	O	ASP	A	229	-12.452	60.903	13.313	1.00	58.85	O
ATOM	1503	N	PHE	A	230	-10.358	61.594	12.888	1.00	58.60	N
ATOM	1504	CA	PHE	A	230	-10.141	62.091	14.267	1.00	58.06	C
ATOM	1505	CB	PHE	A	230	-8.650	62.049	14.623	1.00	57.69	C
ATOM	1506	CG	PHE	A	230	-8.370	62.008	16.077	1.00	55.60	C
ATOM	1507	CD1	PHE	A	230	-8.307	63.170	16.809	1.00	54.68	C
ATOM	1508	CE1	PHE	A	230	-8.036	63.141	18.147	1.00	54.02	C
ATOM	1509	CZ	PHE	A	230	-7.813	61.941	18.781	1.00	54.20	C
ATOM	1510	CE2	PHE	A	230	-7.865	60.769	18.066	1.00	54.45	C
ATOM	1511	CD2	PHE	A	230	-8.138	60.806	16.712	1.00	54.11	C
ATOM	1512	C	PHE	A	230	-10.727	63.477	14.579	1.00	58.35	C
ATOM	1513	O	PHE	A	230	-10.155	64.510	14.211	1.00	57.85	O
ATOM	1514	N	ASP	A	231	-11.847	63.470	15.309	1.00	58.44	N
ATOM	1515	CA	ASP	A	231	-12.629	64.668	15.639	1.00	58.50	C
ATOM	1516	CB	ASP	A	231	-14.075	64.518	15.124	1.00	57.74	C
ATOM	1517	CG	ASP	A	231	-14.791	63.253	15.667	1.00	56.78	C
ATOM	1518	OD1	ASP	A	231	-15.874	62.919	15.144	1.00	56.78	O
ATOM	1519	OD2	ASP	A	231	-14.378	62.532	16.604	1.00	52.61	O
ATOM	1520	C	ASP	A	231	-12.643	65.006	17.132	1.00	59.25	C
ATOM	1521	O	ASP	A	231	-12.071	64.281	17.963	1.00	59.47	O
ATOM	1522	N	GLU	A	232	-13.327	66.096	17.472	1.00	59.95	N
ATOM	1523	CA	GLU	A	232	-13.374	66.578	18.846	1.00	60.49	C
ATOM	1524	CB	GLU	A	232	-14.392	67.707	18.999	1.00	60.69	C
ATOM	1525	CG	GLU	A	232	-14.262	68.439	20.327	1.00	62.80	C
ATOM	1526	CD	GLU	A	232	-15.371	69.443	20.600	1.00	64.81	C
ATOM	1527	OE1	GLU	A	232	-15.835	70.129	19.655	1.00	64.23	O
ATOM	1528	OE2	GLU	A	232	-15.763	69.552	21.786	1.00	66.36	O
ATOM	1529	C	GLU	A	232	-13.688	65.470	19.835	1.00	61.01	C
ATOM	1530	O	GLU	A	232	-12.965	65.259	20.806	1.00	61.33	O
ATOM	1531	N	ALA	A	233	-14.768	64.749	19.610	1.00	61.29	N
ATOM	1532	CA	ALA	A	233	-15.084	63.702	20.566	1.00	62.40	C
ATOM	1533	CB	ALA	A	233	-16.260	62.827	20.086	1.00	62.33	C
ATOM	1534	C	ALA	A	233	-13.845	62.856	20.832	1.00	62.73	C
ATOM	1535	O	ALA	A	233	-13.570	62.480	21.987	1.00	62.85	O
ATOM	1536	N	ALA	A	234	-13.099	62.571	19.762	1.00	63.03	N
ATOM	1537	CA	ALA	A	234	-11.905	61.732	19.863	1.00	63.04	C
ATOM	1538	CB	ALA	A	234	-11.314	61.470	18.500	1.00	63.22	C
ATOM	1539	C	ALA	A	234	-10.877	62.372	20.781	1.00	62.74	C
ATOM	1540	O	ALA	A	234	-10.310	61.709	21.650	1.00	62.34	O
ATOM	1541	N	LEU	A	235	-10.629	63.660	20.575	1.00	62.87	N
ATOM	1542	CA	LEU	A	235	-9.755	64.399	21.462	1.00	63.19	C
ATOM	1543	CB	LEU	A	235	-9.690	65.857	21.055	1.00	62.82	C
ATOM	1544	CG	LEU	A	235	-8.702	66.714	21.845	1.00	63.84	C
ATOM	1545	CD1	LEU	A	235	-7.263	66.381	21.484	1.00	63.36	C
ATOM	1546	CD2	LEU	A	235	-8.964	68.169	21.552	1.00	62.97	C
ATOM	1547	C	LEU	A	235	-10.324	64.295	22.865	1.00	63.74	C
ATOM	1548	O	LEU	A	235	-9.652	63.815	23.785	1.00	63.51	O
ATOM	1549	N	GLN	A	236	-11.577	64.723	23.025	1.00	64.28	N
ATOM	1550	CA	GLN	A	236	-12.181	64.736	24.350	1.00	64.87	C
ATOM	1551	CB	GLN	A	236	-13.638	65.248	24.352	1.00	65.35	C
ATOM	1552	CG	GLN	A	236	-13.805	66.765	24.160	1.00	66.95	C
ATOM	1553	CD	GLN	A	236	-15.129	67.323	24.741	1.00	69.48	C
ATOM	1554	OE1	GLN	A	236	-15.258	67.462	25.962	1.00	70.18	O
ATOM	1555	NE2	GLN	A	236	-16.092	67.662	23.865	1.00	68.05	N
ATOM	1556	C	GLN	A	236	-12.107	63.355	24.939	1.00	64.68	C

Figure 2-30

ATOM	1557	O	GLN	A	236	-11.925	63.204	26.141	1.00	64.71	O
ATOM	1558	N	GLU	A	237	-12.252	62.337	24.102	1.00	64.80	N
ATOM	1559	CA	GLU	A	237	-12.193	60.980	24.617	1.00	64.83	C
ATOM	1560	CB	GLU	A	237	-12.657	59.971	23.584	1.00	65.24	C
ATOM	1561	CG	GLU	A	237	-12.309	58.548	23.960	1.00	67.72	C
ATOM	1562	CD	GLU	A	237	-13.286	57.946	24.947	1.00	70.85	C
ATOM	1563	OE1	GLU	A	237	-13.520	56.726	24.848	1.00	72.03	O
ATOM	1564	OE2	GLU	A	237	-13.820	58.682	25.813	1.00	73.10	O
ATOM	1565	C	GLU	A	237	-10.794	60.624	25.096	1.00	64.32	C
ATOM	1566	O	GLU	A	237	-10.636	59.944	26.114	1.00	64.40	O
ATOM	1567	N	ALA	A	238	-9.784	61.084	24.366	1.00	63.65	N
ATOM	1568	CA	ALA	A	238	-8.397	60.852	24.738	1.00	63.07	C
ATOM	1569	CB	ALA	A	238	-7.474	61.325	23.632	1.00	62.37	C
ATOM	1570	C	ALA	A	238	-8.136	61.631	26.019	1.00	62.70	C
ATOM	1571	O	ALA	A	238	-7.638	61.096	27.014	1.00	62.29	O
ATOM	1572	N	ILE	A	239	-8.493	62.909	25.974	1.00	62.70	N
ATOM	1573	CA	ILE	A	239	-8.341	63.768	27.122	1.00	62.90	C
ATOM	1574	CB	ILE	A	239	-8.921	65.135	26.831	1.00	62.98	C
ATOM	1575	CG1	ILE	A	239	-7.833	66.067	26.333	1.00	61.07	C
ATOM	1576	CD1	ILE	A	239	-8.369	67.224	25.617	1.00	61.38	C
ATOM	1577	CG2	ILE	A	239	-9.566	65.719	28.090	1.00	63.43	C
ATOM	1578	C	ILE	A	239	-9.085	63.117	28.259	1.00	63.62	C
ATOM	1579	O	ILE	A	239	-8.632	63.148	29.415	1.00	63.67	O
ATOM	1580	N	ALA	A	240	-10.217	62.495	27.925	1.00	64.08	N
ATOM	1581	CA	ALA	A	240	-11.008	61.800	28.938	1.00	64.70	C
ATOM	1582	CB	ALA	A	240	-12.394	61.441	28.432	1.00	65.13	C
ATOM	1583	C	ALA	A	240	-10.284	60.564	29.455	1.00	65.01	C
ATOM	1584	O	ALA	A	240	-10.336	60.272	30.645	1.00	65.19	O
ATOM	1585	N	ALA	A	241	-9.609	59.834	28.579	1.00	65.56	N
ATOM	1586	CA	ALA	A	241	-8.846	58.684	29.042	1.00	66.39	C
ATOM	1587	CB	ALA	A	241	-8.361	57.849	27.865	1.00	66.49	C
ATOM	1588	C	ALA	A	241	-7.670	59.155	29.924	1.00	66.78	C
ATOM	1589	O	ALA	A	241	-7.308	58.513	30.905	1.00	66.38	O
ATOM	1590	N	TYR	A	242	-7.088	60.295	29.574	1.00	67.42	N
ATOM	1591	CA	TYR	A	242	-6.008	60.881	30.370	1.00	68.41	C
ATOM	1592	CB	TYR	A	242	-5.651	62.229	29.780	1.00	68.09	C
ATOM	1593	CG	TYR	A	242	-4.553	63.005	30.448	1.00	66.55	C
ATOM	1594	CD1	TYR	A	242	-4.835	64.200	31.085	1.00	64.95	C
ATOM	1595	CE1	TYR	A	242	-3.851	64.948	31.671	1.00	63.78	C
ATOM	1596	CZ	TYR	A	242	-2.557	64.522	31.621	1.00	63.68	C
ATOM	1597	OH	TYR	A	242	-1.611	65.299	32.215	1.00	63.50	O
ATOM	1598	CE2	TYR	A	242	-2.222	63.347	30.977	1.00	64.19	C
ATOM	1599	CD2	TYR	A	242	-3.231	62.593	30.383	1.00	66.30	C
ATOM	1600	C	TYR	A	242	-6.393	61.109	31.817	1.00	69.30	C
ATOM	1601	O	TYR	A	242	-5.600	60.856	32.713	1.00	69.20	O
ATOM	1602	N	ASN	A	243	-7.600	61.626	32.026	1.00	70.78	N
ATOM	1603	CA	ASN	A	243	-8.087	61.924	33.365	1.00	71.94	C
ATOM	1604	CB	ASN	A	243	-9.383	62.744	33.312	1.00	71.78	C
ATOM	1605	CG	ASN	A	243	-9.135	64.248	33.236	1.00	71.71	C
ATOM	1606	OD1	ASN	A	243	-8.701	64.764	32.215	1.00	71.73	O
ATOM	1607	ND2	ASN	A	243	-9.430	64.957	34.320	1.00	71.83	N
ATOM	1608	C	ASN	A	243	-8.301	60.691	34.221	1.00	73.01	C
ATOM	1609	O	ASN	A	243	-8.232	60.789	35.421	1.00	73.12	O
ATOM	1610	N	ALA	A	244	-8.554	59.531	33.628	1.00	74.50	N
ATOM	1611	CA	ALA	A	244	-8.813	58.335	34.432	1.00	75.98	C
ATOM	1612	CB	ALA	A	244	-9.603	57.317	33.629	1.00	76.16	C
ATOM	1613	C	ALA	A	244	-7.548	57.698	35.041	1.00	77.24	C

Figure 2-31

ATOM	1614	O	ALA	A	244	-7.616	56.890	35.976	1.00	76.88	O
ATOM	1615	N	ARG	A	245	-6.396	58.073	34.502	1.00	78.71	N
ATOM	1616	CA	ARG	A	245	-5.126	57.586	34.997	1.00	80.01	C
ATOM	1617	CB	ARG	A	245	-4.087	57.655	33.874	1.00	80.02	C
ATOM	1618	CG	ARG	A	245	-4.630	57.379	32.456	1.00	78.89	C
ATOM	1619	CD	ARG	A	245	-4.162	56.056	31.826	1.00	77.38	C
ATOM	1620	NE	ARG	A	245	-4.595	55.876	30.436	1.00	74.17	N
ATOM	1621	CZ	ARG	A	245	-3.818	56.047	29.369	1.00	71.76	C
ATOM	1622	NH1	ARG	A	245	-4.315	55.852	28.159	1.00	69.30	N
ATOM	1623	NH2	ARG	A	245	-2.547	56.414	29.505	1.00	71.29	N
ATOM	1624	C	ARG	A	245	-4.661	58.447	36.175	1.00	81.18	C
ATOM	1625	O	ARG	A	245	-3.995	57.963	37.085	1.00	81.42	O
ATOM	1626	N	HIS	A	246	-5.037	59.723	36.144	1.00	82.56	N
ATOM	1627	CA	HIS	A	246	-4.614	60.719	37.129	1.00	83.96	C
ATOM	1628	CB	HIS	A	246	-4.416	62.078	36.438	1.00	84.45	C
ATOM	1629	CG	HIS	A	246	-3.000	62.360	36.034	1.00	86.45	C
ATOM	1630	ND1	HIS	A	246	-2.522	62.118	34.763	1.00	88.08	N
ATOM	1631	CE1	HIS	A	246	-1.250	62.469	34.698	1.00	88.40	C
ATOM	1632	NE2	HIS	A	246	-0.885	62.936	35.879	1.00	88.51	N
ATOM	1633	CD2	HIS	A	246	-1.961	62.879	36.734	1.00	87.99	C
ATOM	1634	C	HIS	A	246	-5.564	60.877	38.328	1.00	84.24	C
ATOM	1635	O	HIS	A	246	-6.779	60.683	38.255	1.00	85.12	O
ATOM	1636	OXT	HIS	A	246	-5.164	61.220	39.449	1.00	84.00	O
ATOM	1637	N	GLN	B	18	10.279	32.925	13.877	1.00	52.98	N
ATOM	1638	CA	GLN	B	18	9.726	34.303	13.993	1.00	52.56	C
ATOM	1639	CB	GLN	B	18	8.302	34.348	13.449	1.00	53.13	C
ATOM	1640	CG	GLN	B	18	7.924	33.125	12.634	1.00	55.75	C
ATOM	1641	CD	GLN	B	18	7.372	31.986	13.499	1.00	58.19	C
ATOM	1642	OE1	GLN	B	18	6.527	32.208	14.369	1.00	58.28	O
ATOM	1643	NE2	GLN	B	18	7.853	30.769	13.256	1.00	59.93	N
ATOM	1644	C	GLN	B	18	9.730	34.740	15.453	1.00	51.36	C
ATOM	1645	O	GLN	B	18	8.730	34.543	16.159	1.00	51.76	O
ATOM	1646	N	VAL	B	19	10.835	35.355	15.900	1.00	49.23	N
ATOM	1647	CA	VAL	B	19	10.939	35.776	17.297	1.00	46.32	C
ATOM	1648	CB	VAL	B	19	11.378	34.610	18.144	1.00	46.21	C
ATOM	1649	CG1	VAL	B	19	11.695	35.048	19.539	1.00	46.20	C
ATOM	1650	CG2	VAL	B	19	10.265	33.561	18.148	1.00	46.01	C
ATOM	1651	C	VAL	B	19	11.795	37.010	17.582	1.00	44.95	C
ATOM	1652	O	VAL	B	19	12.970	37.073	17.187	1.00	45.37	O
ATOM	1653	N	PRO	B	20	11.201	37.998	18.265	1.00	42.41	N
ATOM	1654	CA	PRO	B	20	11.905	39.231	18.598	1.00	40.83	C
ATOM	1655	CB	PRO	B	20	10.932	39.928	19.543	1.00	40.83	C
ATOM	1656	CG	PRO	B	20	10.061	38.827	20.024	1.00	41.46	C
ATOM	1657	CD	PRO	B	20	9.831	38.023	18.791	1.00	42.28	C
ATOM	1658	C	PRO	B	20	13.241	38.960	19.296	1.00	38.52	C
ATOM	1659	O	PRO	B	20	13.289	38.414	20.385	1.00	38.49	O
ATOM	1660	N	ALA	B	21	14.321	39.388	18.667	1.00	36.48	N
ATOM	1661	CA	ALA	B	21	15.657	39.219	19.235	1.00	33.65	C
ATOM	1662	CB	ALA	B	21	16.686	39.772	18.287	1.00	34.30	C
ATOM	1663	C	ALA	B	21	15.823	39.818	20.611	1.00	31.72	C
ATOM	1664	O	ALA	B	21	16.359	39.176	21.493	1.00	31.03	O
ATOM	1665	N	HIS	B	22	15.338	41.045	20.809	1.00	29.56	N
ATOM	1666	CA	HIS	B	22	15.516	41.764	22.065	1.00	27.04	C
ATOM	1667	CB	HIS	B	22	16.524	42.937	21.868	1.00	25.78	C
ATOM	1668	CG	HIS	B	22	16.863	43.707	23.120	1.00	22.83	C
ATOM	1669	ND1	HIS	B	22	17.791	44.728	23.128	1.00	20.49	N
ATOM	1670	CE1	HIS	B	22	17.942	45.191	24.356	1.00	16.25	C

Figure 2-32

ATOM	1671	NE2	HIS	B	22	17.119	44.534	25.147	1.00	20.68	N
ATOM	1672	CD2	HIS	B	22	16.426	43.601	24.397	1.00	22.32	C
ATOM	1673	C	HIS	B	22	14.157	42.279	22.586	1.00	28.00	C
ATOM	1674	O	HIS	B	22	13.412	43.023	21.888	1.00	27.55	O
ATOM	1675	N	ILE	B	23	13.826	41.878	23.806	1.00	27.44	N
ATOM	1676	CA	ILE	B	23	12.604	42.319	24.421	1.00	27.81	C
ATOM	1677	CB	ILE	B	23	11.741	41.131	24.819	1.00	27.57	C
ATOM	1678	CG1	ILE	B	23	11.508	40.176	23.633	1.00	27.81	C
ATOM	1679	CD1	ILE	B	23	10.676	38.865	24.050	1.00	28.40	C
ATOM	1680	CG2	ILE	B	23	10.458	41.656	25.403	1.00	24.75	C
ATOM	1681	C	ILE	B	23	12.855	43.073	25.702	1.00	28.74	C
ATOM	1682	O	ILE	B	23	13.473	42.510	26.612	1.00	29.18	O
ATOM	1683	N	GLY	B	24	12.368	44.319	25.797	1.00	28.72	N
ATOM	1684	CA	GLY	B	24	12.404	45.043	27.056	1.00	28.87	C
ATOM	1685	C	GLY	B	24	11.134	44.758	27.845	1.00	29.71	C
ATOM	1686	O	GLY	B	24	10.085	44.597	27.269	1.00	29.00	O
ATOM	1687	N	ILE	B	25	11.220	44.683	29.171	1.00	31.18	N
ATOM	1688	CA	ILE	B	25	10.067	44.358	29.972	1.00	31.60	C
ATOM	1689	CB	ILE	B	25	10.107	42.864	30.406	1.00	32.35	C
ATOM	1690	CG1	ILE	B	25	10.244	41.899	29.217	1.00	28.96	C
ATOM	1691	CD1	ILE	B	25	10.104	40.458	29.599	1.00	27.94	C
ATOM	1692	CG2	ILE	B	25	8.887	42.546	31.213	1.00	31.33	C
ATOM	1693	C	ILE	B	25	10.017	45.243	31.226	1.00	33.46	C
ATOM	1694	O	ILE	B	25	10.962	45.275	32.034	1.00	32.88	O
ATOM	1695	N	ILE	B	26	8.912	45.969	31.394	1.00	34.32	N
ATOM	1696	CA	ILE	B	26	8.776	46.807	32.557	1.00	35.22	C
ATOM	1697	CB	ILE	B	26	8.147	48.147	32.133	1.00	35.09	C
ATOM	1698	CG1	ILE	B	26	8.991	48.790	31.040	1.00	34.65	C
ATOM	1699	CD1	ILE	B	26	8.561	50.185	30.645	1.00	32.60	C
ATOM	1700	CG2	ILE	B	26	7.980	49.071	33.309	1.00	34.58	C
ATOM	1701	C	ILE	B	26	7.889	46.015	33.523	1.00	35.91	C
ATOM	1702	O	ILE	B	26	6.713	45.830	33.289	1.00	35.67	O
ATOM	1703	N	MET	B	27	8.487	45.526	34.589	1.00	37.35	N
ATOM	1704	CA	MET	B	27	7.807	44.701	35.577	1.00	39.07	C
ATOM	1705	CB	MET	B	27	8.832	43.860	36.330	1.00	38.20	C
ATOM	1706	CG	MET	B	27	9.777	43.078	35.465	1.00	37.87	C
ATOM	1707	SD	MET	B	27	11.226	42.507	36.390	1.00	39.94	S
ATOM	1708	CE	MET	B	27	11.685	41.323	35.327	1.00	39.48	C
ATOM	1709	C	MET	B	27	7.078	45.562	36.594	1.00	40.56	C
ATOM	1710	O	MET	B	27	7.683	46.002	37.557	1.00	41.65	O
ATOM	1711	N	ASP	B	28	5.794	45.816	36.378	1.00	42.24	N
ATOM	1712	CA	ASP	B	28	4.985	46.600	37.304	1.00	43.69	C
ATOM	1713	CB	ASP	B	28	4.374	47.786	36.567	1.00	43.25	C
ATOM	1714	CG	ASP	B	28	3.834	48.851	37.506	1.00	44.27	C
ATOM	1715	OD1	ASP	B	28	3.929	48.670	38.731	1.00	47.11	O
ATOM	1716	OD2	ASP	B	28	3.294	49.916	37.121	1.00	45.82	O
ATOM	1717	C	ASP	B	28	3.873	45.701	37.878	1.00	45.24	C
ATOM	1718	O	ASP	B	28	3.260	44.922	37.155	1.00	44.56	O
ATOM	1719	N	GLY	B	29	3.619	45.799	39.176	1.00	47.27	N
ATOM	1720	CA	GLY	B	29	2.544	45.018	39.757	1.00	49.70	C
ATOM	1721	C	GLY	B	29	2.759	44.376	41.108	1.00	51.20	C
ATOM	1722	O	GLY	B	29	1.831	44.354	41.906	1.00	52.56	O
ATOM	1723	N	ASN	B	30	3.951	43.851	41.370	1.00	52.03	N
ATOM	1724	CA	ASN	B	30	4.235	43.172	42.633	1.00	53.33	C
ATOM	1725	CB	ASN	B	30	5.731	43.209	42.938	1.00	52.86	C
ATOM	1726	CG	ASN	B	30	6.565	42.574	41.847	1.00	52.62	C
ATOM	1727	OD1	ASN	B	30	7.774	42.450	41.984	1.00	55.64	O

Figure 2-33

ATOM	1728	ND2	ASN	B	30	5.936	42.183	40.763	1.00	50.90	N
ATOM	1729	C	ASN	B	30	3.448	43.674	43.845	1.00	54.84	C
ATOM	1730	O	ASN	B	30	3.210	42.929	44.796	1.00	54.84	O
ATOM	1731	N	GLY	B	31	3.059	44.945	43.810	1.00	56.34	N
ATOM	1732	CA	GLY	B	31	2.304	45.533	44.898	1.00	58.67	C
ATOM	1733	C	GLY	B	31	0.814	45.271	44.831	1.00	60.21	C
ATOM	1734	O	GLY	B	31	0.225	44.810	45.801	1.00	60.28	O
ATOM	1735	N	ARG	B	32	0.201	45.594	43.694	1.00	62.01	N
ATOM	1736	CA	ARG	B	32	-1.232	45.389	43.503	1.00	63.79	C
ATOM	1737	CB	ARG	B	32	-1.662	45.806	42.094	1.00	63.77	C
ATOM	1738	CG	ARG	B	32	-1.817	47.295	41.897	1.00	64.85	C
ATOM	1739	CD	ARG	B	32	-2.994	47.683	41.017	1.00	66.66	C
ATOM	1740	NE	ARG	B	32	-2.665	47.680	39.596	1.00	67.89	N
ATOM	1741	CZ	ARG	B	32	-3.562	47.656	38.622	1.00	67.63	C
ATOM	1742	NH1	ARG	B	32	-3.167	47.669	37.361	1.00	68.57	N
ATOM	1743	NH2	ARG	B	32	-4.853	47.619	38.904	1.00	68.02	N
ATOM	1744	C	ARG	B	32	-1.554	43.918	43.708	1.00	64.76	C
ATOM	1745	O	ARG	B	32	-2.534	43.560	44.357	1.00	64.86	O
ATOM	1746	N	TRP	B	33	-0.701	43.078	43.144	1.00	65.85	N
ATOM	1747	CA	TRP	B	33	-0.851	41.643	43.249	1.00	67.17	C
ATOM	1748	CB	TRP	B	33	0.309	40.962	42.524	1.00	66.81	C
ATOM	1749	CG	TRP	B	33	0.207	39.473	42.400	1.00	66.16	C
ATOM	1750	CD1	TRP	B	33	-0.432	38.767	41.420	1.00	65.50	C
ATOM	1751	NE1	TRP	B	33	-0.281	37.419	41.639	1.00	65.21	N
ATOM	1752	CE2	TRP	B	33	0.466	37.237	42.773	1.00	64.22	C
ATOM	1753	CD2	TRP	B	33	0.794	38.505	43.271	1.00	64.39	C
ATOM	1754	CE3	TRP	B	33	1.562	38.587	44.435	1.00	63.87	C
ATOM	1755	CZ3	TRP	B	33	1.969	37.441	45.042	1.00	63.55	C
ATOM	1756	CH2	TRP	B	33	1.631	36.192	44.526	1.00	64.45	C
ATOM	1757	CZ2	TRP	B	33	0.879	36.069	43.392	1.00	64.55	C
ATOM	1758	C	TRP	B	33	-0.893	41.211	44.708	1.00	68.45	C
ATOM	1759	O	TRP	B	33	-1.557	40.236	45.048	1.00	68.34	O
ATOM	1760	N	ALA	B	34	-0.185	41.941	45.564	1.00	70.09	N
ATOM	1761	CA	ALA	B	34	-0.133	41.622	46.989	1.00	71.73	C
ATOM	1762	CB	ALA	B	34	1.072	42.277	47.638	1.00	71.76	C
ATOM	1763	C	ALA	B	34	-1.415	41.999	47.730	1.00	72.83	C
ATOM	1764	O	ALA	B	34	-2.172	41.122	48.153	1.00	72.72	O
ATOM	1765	N	LYS	B	35	-1.669	43.297	47.875	1.00	74.30	N
ATOM	1766	CA	LYS	B	35	-2.860	43.744	48.594	1.00	76.07	C
ATOM	1767	CB	LYS	B	35	-3.011	45.268	48.553	1.00	75.88	C
ATOM	1768	CG	LYS	B	35	-3.203	45.851	47.175	1.00	77.46	C
ATOM	1769	CD	LYS	B	35	-2.887	47.359	47.127	1.00	79.37	C
ATOM	1770	CE	LYS	B	35	-1.462	47.639	46.626	1.00	79.80	C
ATOM	1771	NZ	LYS	B	35	-1.097	49.083	46.661	1.00	80.17	N
ATOM	1772	C	LYS	B	35	-4.113	43.027	48.090	1.00	77.05	C
ATOM	1773	O	LYS	B	35	-5.071	42.834	48.837	1.00	77.40	O
ATOM	1774	N	LYS	B	36	-4.080	42.603	46.829	1.00	78.20	N
ATOM	1775	CA	LYS	B	36	-5.180	41.874	46.213	1.00	79.16	C
ATOM	1776	CB	LYS	B	36	-4.898	41.713	44.712	1.00	79.46	C
ATOM	1777	CG	LYS	B	36	-6.097	41.915	43.779	1.00	81.32	C
ATOM	1778	CD	LYS	B	36	-5.698	42.685	42.503	1.00	84.29	C
ATOM	1779	CE	LYS	B	36	-6.643	42.381	41.336	1.00	86.82	C
ATOM	1780	NZ	LYS	B	36	-6.168	42.931	40.034	1.00	86.99	N
ATOM	1781	C	LYS	B	36	-5.305	40.509	46.898	1.00	79.42	C
ATOM	1782	O	LYS	B	36	-6.395	40.068	47.263	1.00	79.43	O
ATOM	1783	N	ARG	B	37	-4.162	39.861	47.082	1.00	79.68	N
ATOM	1784	CA	ARG	B	37	-4.066	38.553	47.715	1.00	79.76	C

Figure 2-34

ATOM	1785	CB	ARG	B	37	-2.730	37.931	47.303	1.00	79.94	C
ATOM	1786	CG	ARG	B	37	-2.722	36.437	47.051	1.00	81.22	C
ATOM	1787	CD	ARG	B	37	-1.863	36.018	45.852	1.00	82.48	C
ATOM	1788	NE	ARG	B	37	-2.540	36.323	44.592	1.00	84.00	N
ATOM	1789	CZ	ARG	B	37	-2.812	35.432	43.649	1.00	84.81	C
ATOM	1790	NH1	ARG	B	37	-2.450	34.168	43.805	1.00	84.92	N
ATOM	1791	NH2	ARG	B	37	-3.440	35.806	42.542	1.00	85.68	N
ATOM	1792	C	ARG	B	37	-4.096	38.751	49.230	1.00	79.76	C
ATOM	1793	O	ARG	B	37	-3.697	37.872	49.993	1.00	79.05	O
ATOM	1794	N	MET	B	38	-4.562	39.924	49.652	1.00	80.08	N
ATOM	1795	CA	MET	B	38	-4.581	40.316	51.063	1.00	80.42	C
ATOM	1796	CB	MET	B	38	-5.855	39.809	51.776	1.00	81.02	C
ATOM	1797	CG	MET	B	38	-6.487	40.821	52.768	1.00	82.86	C
ATOM	1798	SD	MET	B	38	-7.503	40.099	54.160	1.00	86.66	S
ATOM	1799	CE	MET	B	38	-7.923	41.627	55.177	1.00	84.61	C
ATOM	1800	C	MET	B	38	-3.300	39.837	51.761	1.00	79.87	C
ATOM	1801	O	MET	B	38	-3.336	39.312	52.866	1.00	79.71	O
ATOM	1802	N	GLN	B	39	-2.170	40.007	51.081	1.00	79.38	N
ATOM	1803	CA	GLN	B	39	-0.863	39.624	51.605	1.00	78.72	C
ATOM	1804	CB	GLN	B	39	-0.150	38.667	50.655	1.00	78.87	C
ATOM	1805	CG	GLN	B	39	-0.844	37.363	50.426	1.00	81.00	C
ATOM	1806	CD	GLN	B	39	-0.801	36.480	51.641	1.00	83.99	C
ATOM	1807	OE1	GLN	B	39	-0.051	36.745	52.589	1.00	85.39	O
ATOM	1808	NE2	GLN	B	39	-1.601	35.421	51.627	1.00	84.75	N
ATOM	1809	C	GLN	B	39	-0.014	40.870	51.720	1.00	77.80	C
ATOM	1810	O	GLN	B	39	-0.272	41.870	51.052	1.00	77.66	O
ATOM	1811	N	PRO	B	40	0.991	40.821	52.582	1.00	76.85	N
ATOM	1812	CA	PRO	B	40	1.930	41.932	52.718	1.00	75.86	C
ATOM	1813	CB	PRO	B	40	2.858	41.455	53.840	1.00	75.92	C
ATOM	1814	CG	PRO	B	40	2.735	39.972	53.808	1.00	76.66	C
ATOM	1815	CD	PRO	B	40	1.276	39.741	53.544	1.00	77.10	C
ATOM	1816	C	PRO	B	40	2.729	42.159	51.430	1.00	74.70	C
ATOM	1817	O	PRO	B	40	3.057	41.205	50.721	1.00	74.31	O
ATOM	1818	N	ARG	B	41	3.029	43.427	51.160	1.00	73.12	N
ATOM	1819	CA	ARG	B	41	3.809	43.884	50.016	1.00	71.64	C
ATOM	1820	CB	ARG	B	41	4.278	45.299	50.313	1.00	71.81	C
ATOM	1821	CG	ARG	B	41	4.733	46.085	49.132	1.00	72.72	C
ATOM	1822	CD	ARG	B	41	4.577	47.578	49.346	1.00	76.01	C
ATOM	1823	NE	ARG	B	41	3.291	48.083	48.869	1.00	77.79	N
ATOM	1824	CZ	ARG	B	41	2.773	49.238	49.241	1.00	78.71	C
ATOM	1825	NH1	ARG	B	41	3.436	49.993	50.107	1.00	80.56	N
ATOM	1826	NH2	ARG	B	41	1.604	49.643	48.752	1.00	78.42	N
ATOM	1827	C	ARG	B	41	5.021	43.026	49.621	1.00	70.48	C
ATOM	1828	O	ARG	B	41	5.216	42.720	48.451	1.00	69.94	O
ATOM	1829	N	VAL	B	42	5.839	42.650	50.595	1.00	69.38	N
ATOM	1830	CA	VAL	B	42	7.056	41.892	50.318	1.00	68.28	C
ATOM	1831	CB	VAL	B	42	7.911	41.683	51.617	1.00	68.54	C
ATOM	1832	CG1	VAL	B	42	7.060	41.150	52.753	1.00	68.98	C
ATOM	1833	CG2	VAL	B	42	9.118	40.771	51.374	1.00	68.28	C
ATOM	1834	C	VAL	B	42	6.754	40.567	49.609	1.00	67.19	C
ATOM	1835	O	VAL	B	42	7.598	40.019	48.905	1.00	67.04	O
ATOM	1836	N	PHE	B	43	5.540	40.067	49.796	1.00	66.08	N
ATOM	1837	CA	PHE	B	43	5.103	38.837	49.152	1.00	65.22	C
ATOM	1838	CB	PHE	B	43	3.656	38.498	49.555	1.00	65.88	C
ATOM	1839	CG	PHE	B	43	3.311	37.021	49.459	1.00	67.59	C
ATOM	1840	CD1	PHE	B	43	3.754	36.122	50.422	1.00	69.83	C
ATOM	1841	CE1	PHE	B	43	3.428	34.752	50.336	1.00	71.83	C

Figure 2-35

ATOM	1842	CZ	PHE	B	43	2.646	34.284	49.279	1.00	71.32	C
ATOM	1843	CE2	PHE	B	43	2.194	35.171	48.322	1.00	70.58	C
ATOM	1844	CD2	PHE	B	43	2.524	36.536	48.417	1.00	69.89	C
ATOM	1845	C	PHE	B	43	5.182	39.029	47.649	1.00	63.79	C
ATOM	1846	O	PHE	B	43	5.954	38.369	46.967	1.00	63.44	O
ATOM	1847	N	GLY	B	44	4.381	39.955	47.142	1.00	62.39	N
ATOM	1848	CA	GLY	B	44	4.352	40.234	45.723	1.00	60.87	C
ATOM	1849	C	GLY	B	44	5.726	40.284	45.091	1.00	59.83	C
ATOM	1850	O	GLY	B	44	5.945	39.702	44.034	1.00	59.32	O
ATOM	1851	N	HIS	B	45	6.656	40.981	45.738	1.00	59.68	N
ATOM	1852	CA	HIS	B	45	7.999	41.137	45.186	1.00	59.38	C
ATOM	1853	CB	HIS	B	45	8.818	42.200	45.952	1.00	59.77	C
ATOM	1854	CG	HIS	B	45	8.543	43.616	45.508	1.00	60.77	C
ATOM	1855	ND1	HIS	B	45	7.785	44.501	46.248	1.00	60.83	N
ATOM	1856	CE1	HIS	B	45	7.700	45.654	45.608	1.00	60.36	C
ATOM	1857	NE2	HIS	B	45	8.377	45.552	44.479	1.00	60.37	N
ATOM	1858	CD2	HIS	B	45	8.912	44.290	44.390	1.00	60.22	C
ATOM	1859	C	HIS	B	45	8.732	39.791	45.061	1.00	58.99	C
ATOM	1860	O	HIS	B	45	9.419	39.544	44.066	1.00	58.80	O
ATOM	1861	N	LYS	B	46	8.567	38.904	46.041	1.00	58.28	N
ATOM	1862	CA	LYS	B	46	9.221	37.597	45.956	1.00	57.72	C
ATOM	1863	CB	LYS	B	46	9.084	36.797	47.257	1.00	57.96	C
ATOM	1864	CG	LYS	B	46	10.371	36.705	48.070	1.00	59.95	C
ATOM	1865	CD	LYS	B	46	10.124	36.223	49.522	1.00	63.03	C
ATOM	1866	CE	LYS	B	46	11.253	36.652	50.454	1.00	62.73	C
ATOM	1867	NZ	LYS	B	46	11.639	38.085	50.193	1.00	63.55	N
ATOM	1868	C	LYS	B	46	8.648	36.810	44.784	1.00	56.80	C
ATOM	1869	O	LYS	B	46	9.379	36.136	44.053	1.00	56.40	O
ATOM	1870	N	ALA	B	47	7.335	36.923	44.603	1.00	55.58	N
ATOM	1871	CA	ALA	B	47	6.653	36.234	43.517	1.00	54.96	C
ATOM	1872	CB	ALA	B	47	5.154	36.370	43.656	1.00	54.55	C
ATOM	1873	C	ALA	B	47	7.112	36.830	42.210	1.00	54.80	C
ATOM	1874	O	ALA	B	47	7.081	36.188	41.160	1.00	54.84	O
ATOM	1875	N	GLY	B	48	7.533	38.087	42.292	1.00	54.39	N
ATOM	1876	CA	GLY	B	48	8.011	38.802	41.135	1.00	53.55	C
ATOM	1877	C	GLY	B	48	9.267	38.207	40.548	1.00	53.11	C
ATOM	1878	O	GLY	B	48	9.451	38.245	39.334	1.00	53.44	O
ATOM	1879	N	MET	B	49	10.142	37.674	41.393	1.00	52.55	N
ATOM	1880	CA	MET	B	49	11.390	37.088	40.899	1.00	52.33	C
ATOM	1881	CB	MET	B	49	12.428	36.921	42.016	1.00	52.45	C
ATOM	1882	CG	MET	B	49	12.169	37.690	43.278	1.00	54.86	C
ATOM	1883	SD	MET	B	49	13.724	38.317	43.940	1.00	61.04	S
ATOM	1884	CE	MET	B	49	13.303	38.515	45.641	1.00	59.68	C
ATOM	1885	C	MET	B	49	11.095	35.724	40.291	1.00	50.91	C
ATOM	1886	O	MET	B	49	11.776	35.274	39.360	1.00	50.50	O
ATOM	1887	N	GLU	B	50	10.088	35.065	40.860	1.00	49.35	N
ATOM	1888	CA	GLU	B	50	9.650	33.771	40.376	1.00	48.15	C
ATOM	1889	CB	GLU	B	50	8.516	33.204	41.246	1.00	48.50	C
ATOM	1890	CG	GLU	B	50	8.961	32.737	42.626	1.00	50.97	C
ATOM	1891	CD	GLU	B	50	9.475	31.289	42.663	1.00	54.35	C
ATOM	1892	OE1	GLU	B	50	9.796	30.821	43.779	1.00	56.15	O
ATOM	1893	OE2	GLU	B	50	9.571	30.626	41.602	1.00	54.58	O
ATOM	1894	C	GLU	B	50	9.182	34.019	38.966	1.00	46.26	C
ATOM	1895	O	GLU	B	50	9.588	33.337	38.047	1.00	45.33	O
ATOM	1896	N	ALA	B	51	8.317	35.012	38.812	1.00	45.24	N
ATOM	1897	CA	ALA	B	51	7.889	35.440	37.489	1.00	43.86	C
ATOM	1898	CB	ALA	B	51	7.091	36.697	37.575	1.00	43.12	C

Figure 2-36

ATOM	1899	C	ALA	B	51	9.115	35.676	36.626	1.00	42.68	C
ATOM	1900	O	ALA	B	51	9.187	35.213	35.493	1.00	42.77	O
ATOM	1901	N	LEU	B	52	10.100	36.376	37.164	1.00	41.93	N
ATOM	1902	CA	LEU	B	52	11.270	36.672	36.341	1.00	41.92	C
ATOM	1903	CB	LEU	B	52	12.263	37.572	37.072	1.00	41.60	C
ATOM	1904	CG	LEU	B	52	13.463	37.835	36.169	1.00	41.14	C
ATOM	1905	CD1	LEU	B	52	13.017	38.544	34.888	1.00	38.13	C
ATOM	1906	CD2	LEU	B	52	14.492	38.619	36.905	1.00	39.82	C
ATOM	1907	C	LEU	B	52	11.963	35.400	35.866	1.00	41.60	C
ATOM	1908	O	LEU	B	52	12.257	35.254	34.677	1.00	41.80	O
ATOM	1909	N	GLN	B	53	12.191	34.485	36.809	1.00	41.40	N
ATOM	1910	CA	GLN	B	53	12.838	33.204	36.555	1.00	41.02	C
ATOM	1911	CB	GLN	B	53	12.707	32.319	37.797	1.00	41.23	C
ATOM	1912	CG	GLN	B	53	13.449	30.998	37.689	1.00	41.36	C
ATOM	1913	CD	GLN	B	53	14.911	31.210	37.831	1.00	42.80	C
ATOM	1914	OE1	GLN	B	53	15.388	32.310	37.552	1.00	44.50	O
ATOM	1915	NE2	GLN	B	53	15.636	30.201	38.317	1.00	45.40	N
ATOM	1916	C	GLN	B	53	12.237	32.452	35.391	1.00	41.40	C
ATOM	1917	O	GLN	B	53	12.951	31.966	34.485	1.00	40.85	O
ATOM	1918	N	THR	B	54	10.917	32.314	35.401	1.00	41.77	N
ATOM	1919	CA	THR	B	54	10.341	31.529	34.329	1.00	42.61	C
ATOM	1920	CB	THR	B	54	8.955	30.899	34.693	1.00	42.86	C
ATOM	1921	OG1	THR	B	54	8.035	31.182	33.634	1.00	45.32	O
ATOM	1922	CG2	THR	B	54	8.333	31.578	35.844	1.00	42.51	C
ATOM	1923	C	THR	B	54	10.295	32.298	33.033	1.00	42.08	C
ATOM	1924	O	THR	B	54	10.446	31.733	31.958	1.00	42.99	O
ATOM	1925	N	VAL	B	55	10.118	33.603	33.099	1.00	41.99	N
ATOM	1926	CA	VAL	B	55	10.110	34.325	31.830	1.00	40.48	C
ATOM	1927	CB	VAL	B	55	9.691	35.782	31.970	1.00	40.96	C
ATOM	1928	CG1	VAL	B	55	10.137	36.572	30.728	1.00	40.37	C
ATOM	1929	CG2	VAL	B	55	8.171	35.864	32.183	1.00	39.21	C
ATOM	1930	C	VAL	B	55	11.475	34.207	31.228	1.00	39.29	C
ATOM	1931	O	VAL	B	55	11.616	33.947	30.044	1.00	38.85	O
ATOM	1932	N	THR	B	56	12.494	34.358	32.053	1.00	38.72	N
ATOM	1933	CA	THR	B	56	13.850	34.203	31.523	1.00	38.65	C
ATOM	1934	CB	THR	B	56	14.925	34.472	32.624	1.00	38.46	C
ATOM	1935	OG1	THR	B	56	14.733	35.778	33.185	1.00	38.29	O
ATOM	1936	CG2	THR	B	56	16.310	34.562	32.039	1.00	36.70	C
ATOM	1937	C	THR	B	56	14.002	32.808	30.873	1.00	38.37	C
ATOM	1938	O	THR	B	56	14.417	32.693	29.721	1.00	38.03	O
ATOM	1939	N	LYS	B	57	13.620	31.754	31.595	1.00	38.80	N
ATOM	1940	CA	LYS	B	57	13.784	30.388	31.065	1.00	38.98	C
ATOM	1941	CB	LYS	B	57	13.340	29.299	32.067	1.00	39.76	C
ATOM	1942	CG	LYS	B	57	14.379	28.977	33.152	1.00	42.25	C
ATOM	1943	CD	LYS	B	57	14.173	27.602	33.780	1.00	49.21	C
ATOM	1944	CE	LYS	B	57	12.856	27.507	34.530	1.00	51.60	C
ATOM	1945	NZ	LYS	B	57	12.852	26.354	35.485	1.00	54.32	N
ATOM	1946	C	LYS	B	57	13.079	30.244	29.740	1.00	38.40	C
ATOM	1947	O	LYS	B	57	13.704	29.905	28.756	1.00	36.27	O
ATOM	1948	N	ALA	B	58	11.779	30.530	29.739	1.00	39.10	N
ATOM	1949	CA	ALA	B	58	10.980	30.502	28.525	1.00	39.94	C
ATOM	1950	CB	ALA	B	58	9.587	30.996	28.831	1.00	40.00	C
ATOM	1951	C	ALA	B	58	11.578	31.308	27.354	1.00	40.24	C
ATOM	1952	O	ALA	B	58	11.588	30.846	26.227	1.00	40.52	O
ATOM	1953	N	ALA	B	59	12.077	32.507	27.611	1.00	40.78	N
ATOM	1954	CA	ALA	B	59	12.519	33.346	26.502	1.00	41.82	C
ATOM	1955	CB	ALA	B	59	12.795	34.775	26.992	1.00	41.74	C

Figure 2-37

ATOM	1956	C	ALA	B	59	13.758	32.739	25.878	1.00	42.15	C
ATOM	1957	O	ALA	B	59	13.942	32.729	24.658	1.00	41.62	O
ATOM	1958	N	ASN	B	60	14.632	32.262	26.749	1.00	43.31	N
ATOM	1959	CA	ASN	B	60	15.806	31.519	26.321	1.00	44.02	C
ATOM	1960	CB	ASN	B	60	16.555	30.984	27.530	1.00	43.90	C
ATOM	1961	CG	ASN	B	60	17.947	30.559	27.174	1.00	45.40	C
ATOM	1962	OD1	ASN	B	60	18.610	29.820	27.909	1.00	49.42	O
ATOM	1963	ND2	ASN	B	60	18.400	31.014	26.016	1.00	42.16	N
ATOM	1964	C	ASN	B	60	15.462	30.348	25.368	1.00	44.54	C
ATOM	1965	O	ASN	B	60	15.831	30.360	24.184	1.00	44.31	O
ATOM	1966	N	ALA	B	61	14.743	29.350	25.883	1.00	44.76	N
ATOM	1967	CA	ALA	B	61	14.364	28.182	25.074	1.00	44.75	C
ATOM	1968	CB	ALA	B	61	13.708	27.115	25.962	1.00	45.21	C
ATOM	1969	C	ALA	B	61	13.419	28.539	23.973	1.00	44.13	C
ATOM	1970	O	ALA	B	61	13.051	27.682	23.180	1.00	44.96	O
ATOM	1971	N	LEU	B	62	12.965	29.780	23.949	1.00	42.96	N
ATOM	1972	CA	LEU	B	62	12.121	30.170	22.828	1.00	42.37	C
ATOM	1973	CB	LEU	B	62	11.023	31.133	23.278	1.00	42.78	C
ATOM	1974	CG	LEU	B	62	9.570	30.837	22.846	1.00	45.31	C
ATOM	1975	CD1	LEU	B	62	9.267	29.342	22.700	1.00	47.01	C
ATOM	1976	CD2	LEU	B	62	8.583	31.496	23.811	1.00	45.08	C
ATOM	1977	C	LEU	B	62	12.997	30.752	21.696	1.00	41.04	C
ATOM	1978	O	LEU	B	62	12.583	30.840	20.542	1.00	41.03	O
ATOM	1979	N	GLY	B	63	14.219	31.138	22.033	1.00	39.64	N
ATOM	1980	CA	GLY	B	63	15.115	31.687	21.042	1.00	38.30	C
ATOM	1981	C	GLY	B	63	15.404	33.175	21.194	1.00	37.94	C
ATOM	1982	O	GLY	B	63	16.242	33.711	20.451	1.00	37.52	O
ATOM	1983	N	VAL	B	64	14.736	33.846	22.142	1.00	36.29	N
ATOM	1984	CA	VAL	B	64	14.966	35.286	22.351	1.00	34.83	C
ATOM	1985	CB	VAL	B	64	14.084	35.845	23.476	1.00	35.00	C
ATOM	1986	CG1	VAL	B	64	14.453	37.303	23.795	1.00	34.47	C
ATOM	1987	CG2	VAL	B	64	12.613	35.682	23.118	1.00	33.40	C
ATOM	1988	C	VAL	B	64	16.427	35.481	22.713	1.00	33.62	C
ATOM	1989	O	VAL	B	64	16.950	34.709	23.480	1.00	32.74	O
ATOM	1990	N	LYS	B	65	17.083	36.496	22.160	1.00	32.55	N
ATOM	1991	CA	LYS	B	65	18.520	36.733	22.434	1.00	32.33	C
ATOM	1992	CB	LYS	B	65	19.225	37.229	21.179	1.00	33.09	C
ATOM	1993	CG	LYS	B	65	19.486	36.094	20.208	1.00	37.27	C
ATOM	1994	CD	LYS	B	65	19.675	36.591	18.822	1.00	42.98	C
ATOM	1995	CE	LYS	B	65	21.133	36.832	18.515	1.00	43.49	C
ATOM	1996	NZ	LYS	B	65	21.285	36.878	17.021	1.00	44.58	N
ATOM	1997	C	LYS	B	65	18.876	37.631	23.600	1.00	31.22	C
ATOM	1998	O	LYS	B	65	19.963	37.507	24.214	1.00	32.71	O
ATOM	1999	N	VAL	B	66	17.992	38.558	23.900	1.00	29.42	N
ATOM	2000	CA	VAL	B	66	18.208	39.475	24.993	1.00	27.36	C
ATOM	2001	CB	VAL	B	66	18.922	40.785	24.518	1.00	27.87	C
ATOM	2002	CG1	VAL	B	66	19.030	41.785	25.697	1.00	24.90	C
ATOM	2003	CG2	VAL	B	66	20.319	40.470	23.861	1.00	27.53	C
ATOM	2004	C	VAL	B	66	16.889	39.912	25.540	1.00	26.50	C
ATOM	2005	O	VAL	B	66	15.964	40.133	24.777	1.00	26.00	O
ATOM	2006	N	ILE	B	67	16.803	40.011	26.861	1.00	26.47	N
ATOM	2007	CA	ILE	B	67	15.698	40.701	27.506	1.00	27.05	C
ATOM	2008	CB	ILE	B	67	14.703	39.762	28.249	1.00	26.51	C
ATOM	2009	CG1	ILE	B	67	15.392	38.989	29.343	1.00	27.62	C
ATOM	2010	CD1	ILE	B	67	14.483	38.059	30.070	1.00	30.38	C
ATOM	2011	CG2	ILE	B	67	14.068	38.760	27.301	1.00	28.36	C
ATOM	2012	C	ILE	B	67	16.297	41.689	28.481	1.00	27.33	C

Figure 2-38

ATOM	2013	O	ILE	B	67	17.157	41.332	29.283	1.00	27.49	O
ATOM	2014	N	THR	B	68	15.825	42.937	28.426	1.00	27.80	N
ATOM	2015	CA	THR	B	68	16.256	43.947	29.370	1.00	27.28	C
ATOM	2016	CB	THR	B	68	16.591	45.232	28.673	1.00	27.10	C
ATOM	2017	OG1	THR	B	68	17.649	45.011	27.759	1.00	25.13	O
ATOM	2018	CG2	THR	B	68	17.086	46.285	29.662	1.00	23.16	C
ATOM	2019	C	THR	B	68	15.034	44.180	30.206	1.00	28.79	C
ATOM	2020	O	THR	B	68	14.008	44.574	29.679	1.00	28.79	O
ATOM	2021	N	VAL	B	69	15.173	43.942	31.501	1.00	29.86	N
ATOM	2022	CA	VAL	B	69	14.090	44.021	32.435	1.00	30.95	C
ATOM	2023	CB	VAL	B	69	13.799	42.653	33.115	1.00	31.77	C
ATOM	2024	CG1	VAL	B	69	13.943	41.524	32.144	1.00	29.77	C
ATOM	2025	CG2	VAL	B	69	14.689	42.415	34.317	1.00	31.83	C
ATOM	2026	C	VAL	B	69	14.363	45.112	33.441	1.00	32.45	C
ATOM	2027	O	VAL	B	69	15.517	45.370	33.877	1.00	31.26	O
ATOM	2028	N	TYR	B	70	13.281	45.794	33.790	1.00	34.21	N
ATOM	2029	CA	TYR	B	70	13.382	47.024	34.565	1.00	36.27	C
ATOM	2030	CB	TYR	B	70	12.989	48.188	33.650	1.00	36.64	C
ATOM	2031	CG	TYR	B	70	13.046	49.602	34.156	1.00	39.29	C
ATOM	2032	CD1	TYR	B	70	12.167	50.548	33.653	1.00	44.00	C
ATOM	2033	CE1	TYR	B	70	12.198	51.849	34.053	1.00	43.81	C
ATOM	2034	CZ	TYR	B	70	13.109	52.249	34.973	1.00	46.14	C
ATOM	2035	OH	TYR	B	70	13.107	53.573	35.367	1.00	50.21	O
ATOM	2036	CE2	TYR	B	70	14.000	51.345	35.498	1.00	44.82	C
ATOM	2037	CD2	TYR	B	70	13.972	50.020	35.078	1.00	42.94	C
ATOM	2038	C	TYR	B	70	12.474	46.847	35.746	1.00	37.46	C
ATOM	2039	O	TYR	B	70	11.256	46.700	35.618	1.00	35.85	O
ATOM	2040	N	ALA	B	71	13.112	46.791	36.905	1.00	39.73	N
ATOM	2041	CA	ALA	B	71	12.402	46.599	38.160	1.00	42.12	C
ATOM	2042	CB	ALA	B	71	13.220	45.754	39.125	1.00	41.74	C
ATOM	2043	C	ALA	B	71	12.199	47.958	38.728	1.00	43.17	C
ATOM	2044	O	ALA	B	71	13.207	48.692	38.668	1.00	45.48	O
ATOM	2045	OXT	ALA	B	71	11.081	48.177	39.164	1.00	43.30	N
ATOM	2046	N	PRO	B	80	8.362	55.869	48.763	1.00	79.61	N
ATOM	2047	CA	PRO	B	80	9.473	55.383	47.902	1.00	79.53	C
ATOM	2048	CB	PRO	B	80	10.045	56.672	47.291	1.00	79.46	C
ATOM	2049	CG	PRO	B	80	9.579	57.769	48.153	1.00	79.82	C
ATOM	2050	CD	PRO	B	80	8.268	57.339	48.755	1.00	80.03	C
ATOM	2051	C	PRO	B	80	10.550	54.663	48.698	1.00	79.44	C
ATOM	2052	O	PRO	B	80	11.160	53.720	48.175	1.00	79.48	O
ATOM	2053	N	ASP	B	81	10.789	55.110	49.931	1.00	79.07	N
ATOM	2054	CA	ASP	B	81	11.788	54.477	50.784	1.00	78.59	C
ATOM	2055	CB	ASP	B	81	11.615	54.839	52.280	1.00	78.56	C
ATOM	2056	CG	ASP	B	81	10.145	54.946	52.717	1.00	78.95	C
ATOM	2057	OD1	ASP	B	81	9.365	55.641	52.032	1.00	79.38	O
ATOM	2058	OD2	ASP	B	81	9.679	54.403	53.749	1.00	78.79	O
ATOM	2059	C	ASP	B	81	11.755	52.973	50.568	1.00	78.04	C
ATOM	2060	O	ASP	B	81	12.725	52.385	50.110	1.00	77.79	O
ATOM	2061	N	GLN	B	82	10.614	52.369	50.865	1.00	77.83	N
ATOM	2062	CA	GLN	B	82	10.445	50.930	50.742	1.00	77.79	C
ATOM	2063	CB	GLN	B	82	9.028	50.557	51.159	1.00	78.00	C
ATOM	2064	CG	GLN	B	82	8.434	51.484	52.210	1.00	78.56	C
ATOM	2065	CD	GLN	B	82	6.928	51.588	52.081	1.00	79.79	C
ATOM	2066	OE1	GLN	B	82	6.394	51.552	50.969	1.00	80.41	O
ATOM	2067	NE2	GLN	B	82	6.240	51.707	53.208	1.00	80.12	N
ATOM	2068	C	GLN	B	82	10.708	50.444	49.319	1.00	77.33	C
ATOM	2069	O	GLN	B	82	11.459	49.494	49.102	1.00	77.02	O

Figure 2-39

ATOM	2070	N	GLU	B	83	10.092	51.109	48.350	1.00	76.99	N
ATOM	2071	CA	GLU	B	83	10.246	50.703	46.960	1.00	76.98	C
ATOM	2072	CB	GLU	B	83	9.347	51.521	46.022	1.00	77.11	C
ATOM	2073	CG	GLU	B	83	8.162	50.733	45.455	1.00	78.04	C
ATOM	2074	CD	GLU	B	83	7.767	49.535	46.308	1.00	78.62	C
ATOM	2075	OE1	GLU	B	83	6.804	49.641	47.100	1.00	78.70	O
ATOM	2076	OE2	GLU	B	83	8.420	48.478	46.182	1.00	78.48	O
ATOM	2077	C	GLU	B	83	11.705	50.650	46.496	1.00	76.55	C
ATOM	2078	O	GLU	B	83	12.080	49.782	45.701	1.00	76.43	O
ATOM	2079	N	VAL	B	84	12.526	51.563	47.001	1.00	76.01	N
ATOM	2080	CA	VAL	B	84	13.935	51.541	46.659	1.00	75.65	C
ATOM	2081	CB	VAL	B	84	14.672	52.771	47.181	1.00	75.85	C
ATOM	2082	CG1	VAL	B	84	16.122	52.757	46.713	1.00	75.43	C
ATOM	2083	CG2	VAL	B	84	13.968	54.042	46.750	1.00	76.20	C
ATOM	2084	C	VAL	B	84	14.575	50.322	47.300	1.00	75.37	C
ATOM	2085	O	VAL	B	84	15.414	49.659	46.688	1.00	75.36	O
ATOM	2086	N	LYS	B	85	14.171	50.024	48.532	1.00	74.72	N
ATOM	2087	CA	LYS	B	85	14.764	48.914	49.263	1.00	74.35	C
ATOM	2088	CB	LYS	B	85	14.174	48.783	50.667	1.00	74.55	C
ATOM	2089	CG	LYS	B	85	14.852	49.628	51.730	1.00	75.78	C
ATOM	2090	CD	LYS	B	85	14.566	49.063	53.127	1.00	78.72	C
ATOM	2091	CE	LYS	B	85	14.244	50.155	54.141	1.00	79.99	C
ATOM	2092	NZ	LYS	B	85	12.884	50.741	53.897	1.00	81.01	N
ATOM	2093	C	LYS	B	85	14.609	47.606	48.503	1.00	73.54	C
ATOM	2094	O	LYS	B	85	15.556	46.817	48.405	1.00	73.38	O
ATOM	2095	N	PHE	B	86	13.417	47.385	47.962	1.00	72.45	N
ATOM	2096	CA	PHE	B	86	13.143	46.166	47.206	1.00	71.63	C
ATOM	2097	CB	PHE	B	86	11.681	46.121	46.797	1.00	71.97	C
ATOM	2098	CG	PHE	B	86	10.740	46.073	47.960	1.00	73.17	C
ATOM	2099	CD1	PHE	B	86	9.672	46.957	48.043	1.00	73.59	C
ATOM	2100	CE1	PHE	B	86	8.795	46.915	49.110	1.00	74.60	C
ATOM	2101	CZ	PHE	B	86	8.981	45.987	50.117	1.00	75.14	C
ATOM	2102	CE2	PHE	B	86	10.058	45.099	50.050	1.00	75.97	C
ATOM	2103	CD2	PHE	B	86	10.928	45.149	48.973	1.00	73.82	C
ATOM	2104	C	PHE	B	86	14.043	46.010	45.983	1.00	70.42	C
ATOM	2105	O	PHE	B	86	14.566	44.915	45.718	1.00	70.08	O
ATOM	2106	N	ILE	B	87	14.230	47.115	45.266	1.00	68.64	N
ATOM	2107	CA	ILE	B	87	15.061	47.131	44.076	1.00	67.40	C
ATOM	2108	CB	ILE	B	87	14.888	48.470	43.326	1.00	67.30	C
ATOM	2109	CG1	ILE	B	87	13.517	48.496	42.645	1.00	68.09	C
ATOM	2110	CD1	ILE	B	87	13.089	49.892	42.191	1.00	69.98	C
ATOM	2111	CG2	ILE	B	87	15.984	48.663	42.293	1.00	67.09	C
ATOM	2112	C	ILE	B	87	16.532	46.815	44.366	1.00	66.18	C
ATOM	2113	O	ILE	B	87	17.175	46.102	43.601	1.00	66.31	O
ATOM	2114	N	MET	B	88	17.057	47.335	45.470	1.00	64.76	N
ATOM	2115	CA	MET	B	88	18.474	47.143	45.796	1.00	63.78	C
ATOM	2116	CB	MET	B	88	18.983	48.266	46.696	1.00	64.06	C
ATOM	2117	CG	MET	B	88	18.936	49.638	46.053	1.00	65.66	C
ATOM	2118	SD	MET	B	88	20.022	49.782	44.624	1.00	68.76	S
ATOM	2119	CE	MET	B	88	18.969	50.684	43.486	1.00	67.06	C
ATOM	2120	C	MET	B	88	18.747	45.790	46.445	1.00	62.68	C
ATOM	2121	O	MET	B	88	19.877	45.300	46.475	1.00	62.32	O
ATOM	2122	N	ASN	B	89	17.703	45.187	46.978	1.00	61.18	N
ATOM	2123	CA	ASN	B	89	17.854	43.877	47.559	1.00	59.92	C
ATOM	2124	CB	ASN	B	89	16.878	43.725	48.722	1.00	60.06	C
ATOM	2125	CG	ASN	B	89	16.299	42.349	48.821	1.00	61.45	C
ATOM	2126	OD1	ASN	B	89	15.309	42.022	48.147	1.00	63.63	O

Figure 2-40

ATOM	2127	ND2	ASN	B	89	16.898	41.520	49.666	1.00	62.84	N
ATOM	2128	C	ASN	B	89	17.698	42.794	46.479	1.00	58.79	C
ATOM	2129	O	ASN	B	89	18.060	41.623	46.692	1.00	58.62	O
ATOM	2130	N	LEU	B	90	17.205	43.201	45.302	1.00	57.39	N
ATOM	2131	CA	LEU	B	90	16.950	42.260	44.200	1.00	55.73	C
ATOM	2132	CB	LEU	B	90	16.222	42.897	42.995	1.00	55.89	C
ATOM	2133	CG	LEU	B	90	15.648	41.883	41.976	1.00	56.59	C
ATOM	2134	CD1	LEU	B	90	14.402	42.379	41.221	1.00	55.92	C
ATOM	2135	CD2	LEU	B	90	16.715	41.419	40.987	1.00	55.70	C
ATOM	2136	C	LEU	B	90	18.176	41.446	43.766	1.00	54.46	C
ATOM	2137	O	LEU	B	90	18.136	40.242	43.829	1.00	54.15	O
ATOM	2138	N	PRO	B	91	19.255	42.092	43.330	1.00	53.64	N
ATOM	2139	CA	PRO	B	91	20.467	41.369	42.933	1.00	52.87	C
ATOM	2140	CB	PRO	B	91	21.491	42.489	42.758	1.00	53.12	C
ATOM	2141	CG	PRO	B	91	20.679	43.619	42.335	1.00	53.42	C
ATOM	2142	CD	PRO	B	91	19.416	43.549	43.159	1.00	53.51	C
ATOM	2143	C	PRO	B	91	20.950	40.369	43.982	1.00	52.32	C
ATOM	2144	O	PRO	B	91	21.459	39.316	43.595	1.00	51.80	O
ATOM	2145	N	VAL	B	92	20.778	40.665	45.270	1.00	52.18	N
ATOM	2146	CA	VAL	B	92	21.233	39.762	46.335	1.00	52.61	C
ATOM	2147	CB	VAL	B	92	21.229	40.459	47.705	1.00	52.70	C
ATOM	2148	CG1	VAL	B	92	21.368	39.445	48.830	1.00	52.56	C
ATOM	2149	CG2	VAL	B	92	22.342	41.502	47.772	1.00	52.96	C
ATOM	2150	C	VAL	B	92	20.413	38.480	46.443	1.00	52.66	C
ATOM	2151	O	VAL	B	92	20.956	37.366	46.439	1.00	53.01	O
ATOM	2152	N	GLU	B	93	19.105	38.635	46.559	1.00	52.86	N
ATOM	2153	CA	GLU	B	93	18.219	37.488	46.657	1.00	53.26	C
ATOM	2154	CB	GLU	B	93	16.787	37.899	47.019	1.00	53.88	C
ATOM	2155	CG	GLU	B	93	16.378	37.603	48.462	1.00	57.75	C
ATOM	2156	CD	GLU	B	93	14.953	38.049	48.798	1.00	60.93	C
ATOM	2157	OE1	GLU	B	93	14.065	37.173	48.954	1.00	62.20	O
ATOM	2158	OE2	GLU	B	93	14.720	39.277	48.916	1.00	61.67	O
ATOM	2159	C	GLU	B	93	18.195	36.744	45.348	1.00	52.96	C
ATOM	2160	O	GLU	B	93	17.846	35.581	45.336	1.00	52.97	O
ATOM	2161	N	PHE	B	94	18.551	37.395	44.240	1.00	52.37	N
ATOM	2162	CA	PHE	B	94	18.537	36.669	42.968	1.00	52.13	C
ATOM	2163	CB	PHE	B	94	18.345	37.613	41.761	1.00	51.84	C
ATOM	2164	CG	PHE	B	94	17.417	37.065	40.695	1.00	48.83	C
ATOM	2165	CD1	PHE	B	94	16.066	36.871	40.962	1.00	48.16	C
ATOM	2166	CE1	PHE	B	94	15.191	36.356	39.975	1.00	43.91	C
ATOM	2167	CZ	PHE	B	94	15.669	36.046	38.739	1.00	42.92	C
ATOM	2168	CE2	PHE	B	94	17.013	36.258	38.453	1.00	42.75	C
ATOM	2169	CD2	PHE	B	94	17.880	36.761	39.428	1.00	45.79	C
ATOM	2170	C	PHE	B	94	19.771	35.771	42.805	1.00	52.25	C
ATOM	2171	O	PHE	B	94	19.691	34.763	42.146	1.00	52.24	O
ATOM	2172	N	TYR	B	95	20.895	36.133	43.422	1.00	52.77	N
ATOM	2173	CA	TYR	B	95	22.122	35.350	43.335	1.00	54.30	C
ATOM	2174	CB	TYR	B	95	23.388	36.210	43.436	1.00	54.82	C
ATOM	2175	CG	TYR	B	95	24.674	35.396	43.351	1.00	56.28	C
ATOM	2176	CD1	TYR	B	95	25.403	35.340	42.169	1.00	57.29	C
ATOM	2177	CE1	TYR	B	95	26.574	34.620	42.082	1.00	60.36	C
ATOM	2178	CZ	TYR	B	95	27.027	33.912	43.181	1.00	60.52	C
ATOM	2179	OH	TYR	B	95	28.190	33.166	43.105	1.00	63.15	O
ATOM	2180	CE2	TYR	B	95	26.319	33.952	44.365	1.00	60.04	C
ATOM	2181	CD2	TYR	B	95	25.153	34.693	44.448	1.00	58.85	C
ATOM	2182	C	TYR	B	95	22.125	34.316	44.439	1.00	54.70	C
ATOM	2183	O	TYR	B	95	22.791	33.299	44.340	1.00	56.02	O

Figure 2-41

ATOM	2184	N	ASP	B	96	21.396	34.588	45.508	1.00	54.83	N
ATOM	2185	CA	ASP	B	96	21.279	33.633	46.588	1.00	54.79	C
ATOM	2186	CB	ASP	B	96	20.726	34.291	47.870	1.00	55.36	C
ATOM	2187	CG	ASP	B	96	21.820	34.824	48.793	1.00	56.72	C
ATOM	2188	OD1	ASP	B	96	22.954	35.065	48.322	1.00	58.79	O
ATOM	2189	OD2	ASP	B	96	21.634	35.036	50.016	1.00	57.90	O
ATOM	2190	C	ASP	B	96	20.307	32.563	46.135	1.00	54.01	C
ATOM	2191	O	ASP	B	96	20.461	31.404	46.483	1.00	54.92	O
ATOM	2192	N	ASN	B	97	19.308	32.927	45.339	1.00	52.23	N
ATOM	2193	CA	ASN	B	97	18.281	31.934	45.036	1.00	50.91	C
ATOM	2194	CB	ASN	B	97	16.931	32.333	45.671	1.00	51.59	C
ATOM	2195	CG	ASN	B	97	17.033	32.627	47.183	1.00	53.56	C
ATOM	2196	OD1	ASN	B	97	16.446	33.612	47.677	1.00	54.64	O
ATOM	2197	ND2	ASN	B	97	17.762	31.777	47.916	1.00	52.10	N
ATOM	2198	C	ASN	B	97	18.026	31.503	43.588	1.00	49.57	C
ATOM	2199	O	ASN	B	97	17.560	30.414	43.354	1.00	48.86	O
ATOM	2200	N	TYR	B	98	18.308	32.361	42.619	1.00	48.00	N
ATOM	2201	CA	TYR	B	98	17.900	32.075	41.245	1.00	45.81	C
ATOM	2202	CB	TYR	B	98	16.861	33.107	40.779	1.00	45.88	C
ATOM	2203	CG	TYR	B	98	15.578	33.022	41.536	1.00	45.77	C
ATOM	2204	CD1	TYR	B	98	15.299	33.910	42.579	1.00	44.75	C
ATOM	2205	CE1	TYR	B	98	14.116	33.821	43.298	1.00	45.54	C
ATOM	2206	CZ	TYR	B	98	13.191	32.839	42.979	1.00	45.07	C
ATOM	2207	OH	TYR	B	98	12.017	32.759	43.692	1.00	46.29	O
ATOM	2208	CE2	TYR	B	98	13.433	31.957	41.946	1.00	46.43	C
ATOM	2209	CD2	TYR	B	98	14.634	32.044	41.228	1.00	46.22	C
ATOM	2210	C	TYR	B	98	18.998	31.952	40.190	1.00	44.30	C
ATOM	2211	O	TYR	B	98	18.821	31.251	39.207	1.00	44.10	O
ATOM	2212	N	VAL	B	99	20.102	32.657	40.387	1.00	42.52	N
ATOM	2213	CA	VAL	B	99	21.208	32.661	39.446	1.00	40.95	C
ATOM	2214	CB	VAL	B	99	22.299	33.683	39.898	1.00	41.21	C
ATOM	2215	CG1	VAL	B	99	23.590	33.541	39.099	1.00	39.76	C
ATOM	2216	CG2	VAL	B	99	21.766	35.131	39.813	1.00	40.02	C
ATOM	2217	C	VAL	B	99	21.807	31.268	39.078	1.00	40.68	C
ATOM	2218	O	VAL	B	99	22.034	30.989	37.915	1.00	40.68	O
ATOM	2219	N	PRO	B	100	22.097	30.395	40.027	1.00	40.26	N
ATOM	2220	CA	PRO	B	100	22.672	29.101	39.649	1.00	40.19	C
ATOM	2221	CB	PRO	B	100	22.724	28.339	40.979	1.00	40.54	C
ATOM	2222	CG	PRO	B	100	22.769	29.413	42.064	1.00	41.24	C
ATOM	2223	CD	PRO	B	100	21.988	30.549	41.489	1.00	40.37	C
ATOM	2224	C	PRO	B	100	21.834	28.326	38.647	1.00	39.24	C
ATOM	2225	O	PRO	B	100	22.398	27.702	37.747	1.00	38.09	O
ATOM	2226	N	GLU	B	101	20.515	28.349	38.798	1.00	39.20	N
ATOM	2227	CA	GLU	B	101	19.678	27.613	37.870	1.00	38.35	C
ATOM	2228	CB	GLU	B	101	18.236	27.464	38.357	1.00	39.20	C
ATOM	2229	CG	GLU	B	101	17.408	26.680	37.345	1.00	41.41	C
ATOM	2230	CD	GLU	B	101	15.927	26.729	37.602	1.00	46.21	C
ATOM	2231	OE1	GLU	B	101	15.518	27.244	38.667	1.00	48.44	O
ATOM	2232	OE2	GLU	B	101	15.170	26.240	36.734	1.00	48.45	O
ATOM	2233	C	GLU	B	101	19.720	28.303	36.506	1.00	38.08	C
ATOM	2234	O	GLU	B	101	19.658	27.651	35.441	1.00	37.81	O
ATOM	2235	N	LEU	B	102	19.836	29.628	36.519	1.00	37.26	N
ATOM	2236	CA	LEU	B	102	19.939	30.340	35.246	1.00	37.11	C
ATOM	2237	CB	LEU	B	102	19.661	31.845	35.375	1.00	36.21	C
ATOM	2238	CG	LEU	B	102	18.194	32.250	35.600	1.00	37.27	C
ATOM	2239	CD1	LEU	B	102	18.039	33.773	35.674	1.00	37.92	C
ATOM	2240	CD2	LEU	B	102	17.258	31.698	34.572	1.00	37.50	C

Figure 2-42

ATOM	2241	C	LEU	B	102	21.311	30.076	34.642	1.00	36.04	C
ATOM	2242	O	LEU	B	102	21.442	30.001	33.431	1.00	34.61	O
ATOM	2243	N	HIS	B	103	22.328	29.932	35.484	1.00	36.70	N
ATOM	2244	CA	HIS	B	103	23.651	29.629	34.961	1.00	37.95	C
ATOM	2245	CB	HIS	B	103	24.719	29.668	36.044	1.00	38.06	C
ATOM	2246	CG	HIS	B	103	26.054	29.135	35.609	1.00	40.51	C
ATOM	2247	ND1	HIS	B	103	26.604	28.002	36.168	1.00	42.69	N
ATOM	2248	CE1	HIS	B	103	27.790	27.778	35.634	1.00	40.04	C
ATOM	2249	NE2	HIS	B	103	28.040	28.737	34.762	1.00	37.18	N
ATOM	2250	CD2	HIS	B	103	26.968	29.597	34.721	1.00	40.30	C
ATOM	2251	C	HIS	B	103	23.628	28.259	34.329	1.00	37.84	C
ATOM	2252	O	HIS	B	103	24.253	28.030	33.292	1.00	38.57	O
ATOM	2253	N	ALA	B	104	22.902	27.341	34.955	1.00	37.37	N
ATOM	2254	CA	ALA	B	104	22.779	26.008	34.387	1.00	38.02	C
ATOM	2255	CB	ALA	B	104	22.191	25.056	35.409	1.00	38.12	C
ATOM	2256	C	ALA	B	104	21.982	25.987	33.070	1.00	38.06	C
ATOM	2257	O	ALA	B	104	21.801	24.956	32.471	1.00	37.18	O
ATOM	2258	N	ASN	B	105	21.537	27.148	32.613	1.00	38.90	N
ATOM	2259	CA	ASN	B	105	20.769	27.253	31.372	1.00	39.08	C
ATOM	2260	CB	ASN	B	105	19.433	27.950	31.625	1.00	39.56	C
ATOM	2261	CG	ASN	B	105	18.367	27.010	32.135	1.00	41.89	C
ATOM	2262	OD1	ASN	B	105	17.390	26.715	31.433	1.00	44.45	O
ATOM	2263	ND2	ASN	B	105	18.522	26.551	33.372	1.00	43.77	N
ATOM	2264	C	ASN	B	105	21.514	28.033	30.323	1.00	38.21	C
ATOM	2265	O	ASN	B	105	20.909	28.496	29.346	1.00	39.77	O
ATOM	2266	N	ASN	B	106	22.824	28.172	30.475	1.00	37.56	N
ATOM	2267	CA	ASN	B	106	23.588	28.934	29.469	1.00	36.65	C
ATOM	2268	CB	ASN	B	106	23.727	28.221	28.101	1.00	35.59	C
ATOM	2269	CG	ASN	B	106	25.052	28.540	27.428	1.00	34.72	C
ATOM	2270	OD1	ASN	B	106	26.029	28.875	28.111	1.00	37.87	O
ATOM	2271	ND2	ASN	B	106	25.092	28.464	26.023	1.00	36.92	N
ATOM	2272	C	ASN	B	106	23.003	30.326	29.294	1.00	35.12	C
ATOM	2273	O	ASN	B	106	22.955	30.827	28.191	1.00	35.48	O
ATOM	2274	N	VAL	B	107	22.524	30.920	30.384	1.00	34.36	N
ATOM	2275	CA	VAL	B	107	22.063	32.316	30.396	1.00	33.07	C
ATOM	2276	CB	VAL	B	107	20.836	32.481	31.260	1.00	33.16	C
ATOM	2277	CG1	VAL	B	107	20.457	33.994	31.342	1.00	34.21	C
ATOM	2278	CG2	VAL	B	107	19.712	31.633	30.719	1.00	32.72	C
ATOM	2279	C	VAL	B	107	23.138	33.282	30.952	1.00	32.21	C
ATOM	2280	O	VAL	B	107	23.676	33.045	32.015	1.00	30.89	O
ATOM	2281	N	LYS	B	108	23.422	34.350	30.211	1.00	31.64	N
ATOM	2282	CA	LYS	B	108	24.368	35.382	30.584	1.00	32.38	C
ATOM	2283	CB	LYS	B	108	25.069	35.907	29.315	1.00	32.24	C
ATOM	2284	CG	LYS	B	108	26.343	36.804	29.481	1.00	31.20	C
ATOM	2285	CD	LYS	B	108	27.105	36.715	28.173	1.00	31.10	C
ATOM	2286	CE	LYS	B	108	28.001	37.849	27.789	1.00	32.76	C
ATOM	2287	NZ	LYS	B	108	28.932	38.226	28.846	1.00	34.14	N
ATOM	2288	C	LYS	B	108	23.605	36.528	31.267	1.00	33.46	C
ATOM	2289	O	LYS	B	108	22.595	37.024	30.763	1.00	33.95	O
ATOM	2290	N	ILE	B	109	24.100	36.958	32.406	1.00	33.80	N
ATOM	2291	CA	ILE	B	109	23.482	38.014	33.147	1.00	34.09	C
ATOM	2292	CB	ILE	B	109	23.328	37.604	34.622	1.00	34.37	C
ATOM	2293	CG1	ILE	B	109	22.542	36.300	34.748	1.00	33.57	C
ATOM	2294	CD1	ILE	B	109	22.168	35.953	36.158	1.00	31.03	C
ATOM	2295	CG2	ILE	B	109	22.617	38.726	35.395	1.00	36.00	C
ATOM	2296	C	ILE	B	109	24.385	39.225	33.091	1.00	34.75	C
ATOM	2297	O	ILE	B	109	25.621	39.123	33.258	1.00	32.79	O

Figure 2-43

ATOM	2298	N	GLN	B	110	23.782	40.372	32.811	1.00	35.64	N
ATOM	2299	CA	GLN	B	110	24.516	41.645	32.895	1.00	37.56	C
ATOM	2300	CB	GLN	B	110	25.197	42.078	31.584	1.00	37.99	C
ATOM	2301	CG	GLN	B	110	24.773	41.386	30.340	1.00	44.09	C
ATOM	2302	CD	GLN	B	110	25.852	41.403	29.232	1.00	51.12	C
ATOM	2303	OE1	GLN	B	110	25.760	40.638	28.265	1.00	55.59	O
ATOM	2304	NE2	GLN	B	110	26.841	42.274	29.363	1.00	51.18	N
ATOM	2305	C	GLN	B	110	23.617	42.736	33.425	1.00	36.92	C
ATOM	2306	O	GLN	B	110	22.434	42.535	33.606	1.00	35.21	O
ATOM	2307	N	MET	B	111	24.187	43.895	33.680	1.00	38.04	N
ATOM	2308	CA	MET	B	111	23.356	44.978	34.176	1.00	39.79	C
ATOM	2309	CB	MET	B	111	23.362	45.002	35.699	1.00	39.71	C
ATOM	2310	CG	MET	B	111	24.632	45.517	36.325	1.00	44.40	C
ATOM	2311	SD	MET	B	111	24.552	47.344	36.623	1.00	55.55	S
ATOM	2312	CE	MET	B	111	23.305	47.427	37.955	1.00	51.09	C
ATOM	2313	C	MET	B	111	23.654	46.339	33.544	1.00	39.72	C
ATOM	2314	O	MET	B	111	24.747	46.600	33.040	1.00	40.36	O
ATOM	2315	N	ILE	B	112	22.642	47.182	33.496	1.00	40.36	N
ATOM	2316	CA	ILE	B	112	22.822	48.516	32.985	1.00	40.57	C
ATOM	2317	CB	ILE	B	112	22.121	48.727	31.626	1.00	40.84	C
ATOM	2318	CG1	ILE	B	112	20.610	48.668	31.753	1.00	39.98	C
ATOM	2319	CD1	ILE	B	112	19.961	49.183	30.506	1.00	38.12	C
ATOM	2320	CG2	ILE	B	112	22.583	47.721	30.571	1.00	39.89	C
ATOM	2321	C	ILE	B	112	22.289	49.461	34.030	1.00	41.29	C
ATOM	2322	O	ILE	B	112	21.284	49.176	34.695	1.00	39.85	O
ATOM	2323	N	GLY	B	113	22.985	50.579	34.165	1.00	42.75	N
ATOM	2324	CA	GLY	B	113	22.651	51.604	35.132	1.00	46.01	C
ATOM	2325	C	GLY	B	113	23.884	52.094	35.858	1.00	48.44	C
ATOM	2326	O	GLY	B	113	25.016	51.747	35.503	1.00	47.59	O
ATOM	2327	N	GLU	B	114	23.685	52.923	36.875	1.00	50.88	N
ATOM	2328	CA	GLU	B	114	24.833	53.405	37.624	1.00	53.27	C
ATOM	2329	CB	GLU	B	114	24.840	54.938	37.793	1.00	53.34	C
ATOM	2330	CG	GLU	B	114	23.661	55.683	37.195	1.00	56.84	C
ATOM	2331	CD	GLU	B	114	23.939	57.176	36.955	1.00	63.35	C
ATOM	2332	OE1	GLU	B	114	22.961	57.946	36.702	1.00	66.30	O
ATOM	2333	OE2	GLU	B	114	25.126	57.598	37.009	1.00	63.70	O
ATOM	2334	C	GLU	B	114	25.018	52.626	38.927	1.00	54.27	C
ATOM	2335	O	GLU	B	114	24.122	52.545	39.752	1.00	53.90	O
ATOM	2336	N	THR	B	115	26.192	52.020	39.066	1.00	56.30	N
ATOM	2337	CA	THR	B	115	26.524	51.162	40.204	1.00	58.76	C
ATOM	2338	CB	THR	B	115	27.628	50.199	39.786	1.00	58.64	C
ATOM	2339	OG1	THR	B	115	28.835	50.938	39.544	1.00	58.75	O
ATOM	2340	CG2	THR	B	115	27.300	49.581	38.413	1.00	59.15	C
ATOM	2341	C	THR	B	115	27.007	51.957	41.404	1.00	60.20	C
ATOM	2342	O	THR	B	115	26.536	51.780	42.526	1.00	60.22	O
ATOM	2343	N	ASP	B	116	27.976	52.820	41.121	1.00	62.27	N
ATOM	2344	CA	ASP	B	116	28.621	53.713	42.073	1.00	63.80	C
ATOM	2345	CB	ASP	B	116	28.869	55.070	41.392	1.00	65.00	C
ATOM	2346	CG	ASP	B	116	29.423	54.916	39.950	1.00	67.44	C
ATOM	2347	OD1	ASP	B	116	30.548	54.384	39.798	1.00	68.83	O
ATOM	2348	OD2	ASP	B	116	28.798	55.279	38.913	1.00	70.80	O
ATOM	2349	C	ASP	B	116	27.898	53.868	43.423	1.00	63.92	C
ATOM	2350	O	ASP	B	116	28.522	53.744	44.481	1.00	65.11	O
ATOM	2351	N	ALA	B	117	26.590	54.102	43.394	1.00	63.39	N
ATOM	2352	CA	ALA	B	117	25.832	54.210	44.638	1.00	62.80	C
ATOM	2353	CB	ALA	B	117	25.090	55.556	44.712	1.00	63.33	C
ATOM	2354	C	ALA	B	117	24.868	53.036	44.898	1.00	62.17	C

Figure 2-44

ATOM	2355	O	ALA	B	117	23.681	53.257	45.170	1.00	62.60	O
ATOM	2356	N	LEU	B	118	25.353	51.802	44.796	1.00	60.32	N
ATOM	2357	CA	LEU	B	118	24.526	50.682	45.175	1.00	58.58	C
ATOM	2358	CB	LEU	B	118	24.645	49.538	44.180	1.00	58.59	C
ATOM	2359	CG	LEU	B	118	23.992	49.696	42.809	1.00	58.97	C
ATOM	2360	CD1	LEU	B	118	24.140	48.412	42.024	1.00	58.87	C
ATOM	2361	CD2	LEU	B	118	22.533	50.068	42.952	1.00	58.19	C
ATOM	2362	C	LEU	B	118	25.109	50.291	46.495	1.00	57.25	C
ATOM	2363	O	LEU	B	118	26.277	50.538	46.751	1.00	57.19	O
ATOM	2364	N	PRO	B	119	24.297	49.727	47.360	1.00	56.28	N
ATOM	2365	CA	PRO	B	119	24.796	49.216	48.633	1.00	55.61	C
ATOM	2366	CB	PRO	B	119	23.586	48.495	49.220	1.00	55.64	C
ATOM	2367	CG	PRO	B	119	22.403	49.096	48.542	1.00	56.05	C
ATOM	2368	CD	PRO	B	119	22.847	49.547	47.189	1.00	56.40	C
ATOM	2369	C	PRO	B	119	25.883	48.204	48.308	1.00	55.20	C
ATOM	2370	O	PRO	B	119	25.813	47.558	47.262	1.00	54.93	O
ATOM	2371	N	ALA	B	120	26.864	48.051	49.182	1.00	54.37	N
ATOM	2372	CA	ALA	B	120	27.937	47.107	48.912	1.00	53.79	C
ATOM	2373	CB	ALA	B	120	28.873	46.988	50.120	1.00	53.82	C
ATOM	2374	C	ALA	B	120	27.394	45.737	48.492	1.00	52.78	C
ATOM	2375	O	ALA	B	120	27.552	45.299	47.352	1.00	52.31	O
ATOM	2376	N	ALA	B	121	26.747	45.071	49.428	1.00	51.60	N
ATOM	2377	CA	ALA	B	121	26.180	43.758	49.184	1.00	50.15	C
ATOM	2378	CB	ALA	B	121	25.139	43.438	50.263	1.00	50.38	C
ATOM	2379	C	ALA	B	121	25.564	43.658	47.802	1.00	48.91	C
ATOM	2380	O	ALA	B	121	25.461	42.581	47.241	1.00	48.90	O
ATOM	2381	N	THR	B	122	25.164	44.787	47.244	1.00	47.99	N
ATOM	2382	CA	THR	B	122	24.497	44.782	45.946	1.00	47.28	C
ATOM	2383	CB	THR	B	122	23.502	45.953	45.839	1.00	47.44	C
ATOM	2384	OG1	THR	B	122	22.457	45.755	46.788	1.00	47.92	O
ATOM	2385	CG2	THR	B	122	22.760	45.902	44.517	1.00	47.45	C
ATOM	2386	C	THR	B	122	25.473	44.817	44.788	1.00	46.22	C
ATOM	2387	O	THR	B	122	25.274	44.150	43.785	1.00	46.09	O
ATOM	2388	N	PHE	B	123	26.495	45.656	44.895	1.00	45.38	N
ATOM	2389	CA	PHE	B	123	27.542	45.653	43.900	1.00	44.82	C
ATOM	2390	CB	PHE	B	123	28.668	46.598	44.293	1.00	45.07	C
ATOM	2391	CG	PHE	B	123	29.622	46.867	43.187	1.00	45.50	C
ATOM	2392	CD1	PHE	B	123	30.922	46.403	43.245	1.00	48.15	C
ATOM	2393	CE1	PHE	B	123	31.789	46.617	42.200	1.00	46.13	C
ATOM	2394	CZ	PHE	B	123	31.358	47.282	41.090	1.00	46.52	C
ATOM	2395	CE2	PHE	B	123	30.057	47.731	41.024	1.00	47.36	C
ATOM	2396	CD2	PHE	B	123	29.198	47.509	42.059	1.00	45.44	C
ATOM	2397	C	PHE	B	123	28.082	44.218	43.865	1.00	44.58	C
ATOM	2398	O	PHE	B	123	28.311	43.650	42.795	1.00	44.49	O
ATOM	2399	N	GLU	B	124	28.234	43.616	45.048	1.00	43.92	N
ATOM	2400	CA	GLU	B	124	28.829	42.286	45.199	1.00	43.96	C
ATOM	2401	CB	GLU	B	124	29.054	41.978	46.681	1.00	44.41	C
ATOM	2402	CG	GLU	B	124	30.100	42.857	47.345	1.00	46.55	C
ATOM	2403	CD	GLU	B	124	30.360	42.486	48.813	1.00	50.71	C
ATOM	2404	OE1	GLU	B	124	29.644	41.598	49.370	1.00	51.07	O
ATOM	2405	OE2	GLU	B	124	31.280	43.099	49.420	1.00	50.99	O
ATOM	2406	C	GLU	B	124	28.035	41.153	44.541	1.00	43.00	C
ATOM	2407	O	GLU	B	124	28.550	40.425	43.693	1.00	42.41	O
ATOM	2408	N	ALA	B	125	26.780	41.021	44.949	1.00	42.67	N
ATOM	2409	CA	ALA	B	125	25.900	40.051	44.349	1.00	41.85	C
ATOM	2410	CB	ALA	B	125	24.492	40.144	44.932	1.00	41.12	C
ATOM	2411	C	ALA	B	125	25.864	40.232	42.843	1.00	41.59	C

Figure 2-45

ATOM	2412	O	ALA	B	125	26.106	39.278	42.105	1.00	41.94	O
ATOM	2413	N	LEU	B	126	25.598	41.421	42.348	1.00	40.73	N
ATOM	2414	CA	LEU	B	126	25.424	41.473	40.920	1.00	41.09	C
ATOM	2415	CB	LEU	B	126	24.617	42.690	40.434	1.00	41.62	C
ATOM	2416	CG	LEU	B	126	25.147	44.072	40.701	1.00	43.21	C
ATOM	2417	CD1	LEU	B	126	26.306	44.303	39.717	1.00	47.83	C
ATOM	2418	CD2	LEU	B	126	24.040	45.077	40.514	1.00	43.60	C
ATOM	2419	C	LEU	B	126	26.743	41.215	40.192	1.00	40.77	C
ATOM	2420	O	LEU	B	126	26.746	40.610	39.114	1.00	39.90	O
ATOM	2421	N	THR	B	127	27.844	41.670	40.799	1.00	39.58	N
ATOM	2422	CA	THR	B	127	29.169	41.378	40.293	1.00	39.50	C
ATOM	2423	CB	THR	B	127	30.254	41.931	41.212	1.00	39.95	C
ATOM	2424	OG1	THR	B	127	30.502	43.307	40.935	1.00	40.20	O
ATOM	2425	CG2	THR	B	127	31.577	41.284	40.845	1.00	41.26	C
ATOM	2426	C	THR	B	127	29.385	39.864	40.236	1.00	39.37	C
ATOM	2427	O	THR	B	127	29.924	39.354	39.258	1.00	38.55	O
ATOM	2428	N	LYS	B	128	28.992	39.161	41.308	1.00	38.80	N
ATOM	2429	CA	LYS	B	128	29.107	37.699	41.354	1.00	38.93	C
ATOM	2430	CB	LYS	B	128	28.570	37.139	42.672	1.00	38.95	C
ATOM	2431	CG	LYS	B	128	29.572	36.908	43.772	1.00	43.14	C
ATOM	2432	CD	LYS	B	128	28.817	36.555	45.036	1.00	47.81	C
ATOM	2433	CE	LYS	B	128	29.340	37.316	46.233	1.00	50.48	C
ATOM	2434	NZ	LYS	B	128	28.725	36.770	47.486	1.00	54.23	N
ATOM	2435	C	LYS	B	128	28.287	37.056	40.253	1.00	37.65	C
ATOM	2436	O	LYS	B	128	28.693	36.048	39.676	1.00	37.16	O
ATOM	2437	N	ALA	B	129	27.100	37.601	39.991	1.00	36.14	N
ATOM	2438	CA	ALA	B	129	26.259	36.993	38.960	1.00	34.97	C
ATOM	2439	CB	ALA	B	129	24.836	37.476	39.053	1.00	33.12	C
ATOM	2440	C	ALA	B	129	26.842	37.194	37.552	1.00	33.73	C
ATOM	2441	O	ALA	B	129	26.687	36.376	36.663	1.00	33.26	O
ATOM	2442	N	GLU	B	130	27.541	38.285	37.361	1.00	33.48	N
ATOM	2443	CA	GLU	B	130	28.051	38.565	36.052	1.00	33.82	C
ATOM	2444	CB	GLU	B	130	28.494	40.034	35.929	1.00	33.93	C
ATOM	2445	CG	GLU	B	130	27.388	41.041	35.646	1.00	37.35	C
ATOM	2446	CD	GLU	B	130	27.875	42.498	35.773	1.00	41.79	C
ATOM	2447	OE1	GLU	B	130	28.868	42.757	36.485	1.00	42.79	O
ATOM	2448	OE2	GLU	B	130	27.278	43.386	35.146	1.00	42.77	O
ATOM	2449	C	GLU	B	130	29.212	37.644	35.767	1.00	33.47	C
ATOM	2450	O	GLU	B	130	29.321	37.080	34.658	1.00	32.54	O
ATOM	2451	N	GLU	B	131	30.071	37.501	36.769	1.00	32.52	N
ATOM	2452	CA	GLU	B	131	31.313	36.733	36.612	1.00	33.67	C
ATOM	2453	CB	GLU	B	131	32.220	36.908	37.824	1.00	33.59	C
ATOM	2454	CG	GLU	B	131	33.075	38.135	37.765	1.00	36.73	C
ATOM	2455	CD	GLU	B	131	33.529	38.529	39.134	1.00	42.87	C
ATOM	2456	OE1	GLU	B	131	33.095	37.853	40.093	1.00	46.41	O
ATOM	2457	OE2	GLU	B	131	34.295	39.504	39.258	1.00	46.22	O
ATOM	2458	C	GLU	B	131	31.029	35.265	36.460	1.00	33.35	C
ATOM	2459	O	GLU	B	131	31.738	34.542	35.760	1.00	32.93	O
ATOM	2460	N	LEU	B	132	29.985	34.832	37.140	1.00	32.35	N
ATOM	2461	CA	LEU	B	132	29.621	33.461	37.070	1.00	32.08	C
ATOM	2462	CB	LEU	B	132	28.476	33.185	38.025	1.00	31.80	C
ATOM	2463	CG	LEU	B	132	27.777	31.851	37.892	1.00	32.57	C
ATOM	2464	CD1	LEU	B	132	28.776	30.735	38.166	1.00	34.70	C
ATOM	2465	CD2	LEU	B	132	26.654	31.795	38.876	1.00	31.68	C
ATOM	2466	C	LEU	B	132	29.196	33.147	35.656	1.00	32.10	C
ATOM	2467	O	LEU	B	132	29.388	32.040	35.210	1.00	31.30	O
ATOM	2468	N	THR	B	133	28.675	34.136	34.928	1.00	31.67	N

Figure 2-46

ATOM	2469	CA	THR	B	133	28.022	33.851	33.651	1.00	30.54	C
ATOM	2470	CB	THR	B	133	26.538	34.348	33.682	1.00	31.82	C
ATOM	2471	OG1	THR	B	133	26.489	35.710	34.168	1.00	30.87	O
ATOM	2472	CG2	THR	B	133	25.720	33.579	34.722	1.00	30.99	C
ATOM	2473	C	THR	B	133	28.649	34.408	32.423	1.00	29.83	C
ATOM	2474	O	THR	B	133	28.116	34.245	31.348	1.00	29.02	O
ATOM	2475	N	LYS	B	134	29.758	35.107	32.546	1.00	30.51	N
ATOM	2476	CA	LYS	B	134	30.275	35.782	31.358	1.00	31.38	C
ATOM	2477	CB	LYS	B	134	31.461	36.657	31.736	1.00	31.83	C
ATOM	2478	CG	LYS	B	134	32.610	35.866	32.347	1.00	35.39	C
ATOM	2479	CD	LYS	B	134	33.904	36.688	32.410	1.00	38.00	C
ATOM	2480	CE	LYS	B	134	35.136	35.767	32.616	1.00	40.06	C
ATOM	2481	NZ	LYS	B	134	36.454	36.497	32.501	1.00	43.22	N
ATOM	2482	C	LYS	B	134	30.633	34.898	30.133	1.00	31.61	C
ATOM	2483	O	LYS	B	134	30.867	35.434	29.040	1.00	32.36	O
ATOM	2484	N	ASN	B	135	30.707	33.578	30.281	1.00	30.06	N
ATOM	2485	CA	ASN	B	135	31.023	32.766	29.106	1.00	29.32	C
ATOM	2486	CB	ASN	B	135	32.005	31.627	29.398	1.00	29.27	C
ATOM	2487	CG	ASN	B	135	33.160	32.052	30.240	1.00	28.01	C
ATOM	2488	OD1	ASN	B	135	33.943	32.880	29.832	1.00	29.70	O
ATOM	2489	ND2	ASN	B	135	33.300	31.437	31.418	1.00	28.33	N
ATOM	2490	C	ASN	B	135	29.794	32.123	28.558	1.00	28.67	C
ATOM	2491	O	ASN	B	135	29.841	31.521	27.483	1.00	28.05	O
ATOM	2492	N	ASN	B	136	28.694	32.207	29.290	1.00	28.32	N
ATOM	2493	CA	ASN	B	136	27.484	31.603	28.785	1.00	30.33	C
ATOM	2494	CB	ASN	B	136	26.399	31.660	29.842	1.00	31.15	C
ATOM	2495	CG	ASN	B	136	26.845	30.966	31.127	1.00	33.75	C
ATOM	2496	OD1	ASN	B	136	26.038	30.599	31.987	1.00	39.06	O
ATOM	2497	ND2	ASN	B	136	28.139	30.786	31.255	1.00	32.22	N
ATOM	2498	C	ASN	B	136	27.086	32.218	27.421	1.00	31.29	C
ATOM	2499	O	ASN	B	136	27.376	33.411	27.137	1.00	29.96	O
ATOM	2500	N	THR	B	137	26.494	31.389	26.566	1.00	31.59	N
ATOM	2501	CA	THR	B	137	26.249	31.806	25.186	1.00	31.74	C
ATOM	2502	CB	THR	B	137	27.100	30.929	24.163	1.00	32.03	C
ATOM	2503	OG1	THR	B	137	26.752	29.551	24.277	1.00	31.28	O
ATOM	2504	CG2	THR	B	137	28.541	30.929	24.477	1.00	29.88	C
ATOM	2505	C	THR	B	137	24.773	31.711	24.842	1.00	31.10	C
ATOM	2506	O	THR	B	137	24.394	31.746	23.684	1.00	31.08	O
ATOM	2507	N	GLY	B	138	23.929	31.542	25.840	1.00	31.30	N
ATOM	2508	CA	GLY	B	138	22.496	31.522	25.557	1.00	32.11	C
ATOM	2509	C	GLY	B	138	21.949	32.965	25.647	1.00	31.99	C
ATOM	2510	O	GLY	B	138	22.693	33.969	25.545	1.00	31.29	O
ATOM	2511	N	LEU	B	139	20.650	33.068	25.845	1.00	31.75	N
ATOM	2512	CA	LEU	B	139	19.999	34.372	26.091	1.00	32.55	C
ATOM	2513	CB	LEU	B	139	18.595	34.108	26.602	1.00	31.53	C
ATOM	2514	CG	LEU	B	139	17.844	35.235	27.261	1.00	33.59	C
ATOM	2515	CD1	LEU	B	139	17.229	36.058	26.183	1.00	32.07	C
ATOM	2516	CD2	LEU	B	139	16.761	34.669	28.211	1.00	33.88	C
ATOM	2517	C	LEU	B	139	20.717	35.270	27.119	1.00	32.72	C
ATOM	2518	O	LEU	B	139	21.125	34.818	28.182	1.00	32.85	O
ATOM	2519	N	ILE	B	140	20.822	36.558	26.825	1.00	33.58	N
ATOM	2520	CA	ILE	B	140	21.446	37.472	27.751	1.00	33.39	C
ATOM	2521	CB	ILE	B	140	22.218	38.490	26.970	1.00	33.69	C
ATOM	2522	CG1	ILE	B	140	23.367	37.827	26.243	1.00	31.10	C
ATOM	2523	CD1	ILE	B	140	24.183	38.837	25.493	1.00	36.90	C
ATOM	2524	CG2	ILE	B	140	22.677	39.625	27.862	1.00	33.07	C
ATOM	2525	C	ILE	B	140	20.386	38.178	28.554	1.00	34.38	C

Figure 2-47

ATOM	2526	O	ILE	B	140	19.558	38.863	27.976	1.00	36.08	O
ATOM	2527	N	LEU	B	141	20.399	38.020	29.878	1.00	34.13	N
ATOM	2528	CA	LEU	B	141	19.424	38.670	30.754	1.00	34.18	C
ATOM	2529	CB	LEU	B	141	18.954	37.709	31.852	1.00	33.87	C
ATOM	2530	CG	LEU	B	141	18.202	38.254	33.059	1.00	34.61	C
ATOM	2531	CD1	LEU	B	141	16.838	38.863	32.668	1.00	35.97	C
ATOM	2532	CD2	LEU	B	141	18.026	37.189	34.125	1.00	30.75	C
ATOM	2533	C	LEU	B	141	19.972	39.995	31.355	1.00	34.32	C
ATOM	2534	O	LEU	B	141	20.874	39.980	32.147	1.00	34.29	O
ATOM	2535	N	ASN	B	142	19.398	41.121	30.951	1.00	34.35	N
ATOM	2536	CA	ASN	B	142	19.816	42.437	31.390	1.00	35.82	C
ATOM	2537	CB	ASN	B	142	19.809	43.348	30.188	1.00	37.16	C
ATOM	2538	CG	ASN	B	142	21.165	43.756	29.822	1.00	40.98	C
ATOM	2539	OD1	ASN	B	142	21.791	44.585	30.514	1.00	42.04	O
ATOM	2540	ND2	ASN	B	142	21.691	43.130	28.761	1.00	43.88	N
ATOM	2541	C	ASN	B	142	19.016	43.159	32.443	1.00	35.03	C
ATOM	2542	O	ASN	B	142	17.897	43.623	32.155	1.00	35.35	O
ATOM	2543	N	PHE	B	143	19.565	43.281	33.640	1.00	34.46	N
ATOM	2544	CA	PHE	B	143	18.890	44.051	34.692	1.00	35.28	C
ATOM	2545	CB	PHE	B	143	19.388	43.683	36.071	1.00	35.33	C
ATOM	2546	CG	PHE	B	143	18.845	42.397	36.571	1.00	36.34	C
ATOM	2547	CD1	PHE	B	143	17.705	42.380	37.358	1.00	33.28	C
ATOM	2548	CE1	PHE	B	143	17.199	41.179	37.831	1.00	37.07	C
ATOM	2549	CZ	PHE	B	143	17.850	39.957	37.522	1.00	34.86	C
ATOM	2550	CE2	PHE	B	143	18.984	39.964	36.736	1.00	35.18	C
ATOM	2551	CD2	PHE	B	143	19.492	41.191	36.262	1.00	35.33	C
ATOM	2552	C	PHE	B	143	19.137	45.524	34.557	1.00	35.06	C
ATOM	2553	O	PHE	B	143	20.269	45.977	34.513	1.00	35.09	O
ATOM	2554	N	ALA	B	144	18.063	46.270	34.486	1.00	35.18	N
ATOM	2555	CA	ALA	B	144	18.156	47.700	34.489	1.00	35.26	C
ATOM	2556	CB	ALA	B	144	17.141	48.284	33.526	1.00	34.89	C
ATOM	2557	C	ALA	B	144	17.868	48.111	35.926	1.00	35.60	C
ATOM	2558	O	ALA	B	144	16.732	48.134	36.357	1.00	36.05	O
ATOM	2559	N	LEU	B	145	18.896	48.454	36.674	1.00	36.21	N
ATOM	2560	CA	LEU	B	145	18.708	48.756	38.077	1.00	37.04	C
ATOM	2561	CB	LEU	B	145	19.360	47.703	38.984	1.00	38.04	C
ATOM	2562	CG	LEU	B	145	18.384	46.870	39.782	1.00	39.89	C
ATOM	2563	CD1	LEU	B	145	17.937	45.656	38.995	1.00	43.90	C
ATOM	2564	CD2	LEU	B	145	19.016	46.439	41.080	1.00	44.54	C
ATOM	2565	C	LEU	B	145	19.359	50.062	38.288	1.00	36.76	C
ATOM	2566	O	LEU	B	145	20.369	50.358	37.663	1.00	37.25	O
ATOM	2567	N	ASN	B	146	18.803	50.861	39.185	1.00	36.39	N
ATOM	2568	CA	ASN	B	146	19.353	52.176	39.341	1.00	35.46	C
ATOM	2569	CB	ASN	B	146	20.754	52.145	39.935	1.00	36.64	C
ATOM	2570	CG	ASN	B	146	21.067	53.433	40.672	1.00	38.80	C
ATOM	2571	OD1	ASN	B	146	20.184	53.978	41.304	1.00	42.15	O
ATOM	2572	ND2	ASN	B	146	22.292	53.931	40.576	1.00	41.24	N
ATOM	2573	C	ASN	B	146	19.454	52.779	37.982	1.00	33.81	C
ATOM	2574	O	ASN	B	146	20.447	53.452	37.648	1.00	33.17	O
ATOM	2575	N	TYR	B	147	18.414	52.558	37.193	1.00	32.15	N
ATOM	2576	CA	TYR	B	147	18.441	53.067	35.835	1.00	31.20	C
ATOM	2577	CB	TYR	B	147	18.434	51.896	34.845	1.00	31.08	C
ATOM	2578	CG	TYR	B	147	18.271	52.332	33.406	1.00	30.14	C
ATOM	2579	CD1	TYR	B	147	19.364	52.377	32.541	1.00	27.23	C
ATOM	2580	CE1	TYR	B	147	19.232	52.779	31.245	1.00	26.71	C
ATOM	2581	CZ	TYR	B	147	17.971	53.153	30.784	1.00	29.39	C
ATOM	2582	OH	TYR	B	147	17.802	53.559	29.483	1.00	21.06	O

Figure 2-48

ATOM	2583	CE2	TYR	B	147	16.872	53.102	31.631	1.00	29.94	C
ATOM	2584	CD2	TYR	B	147	17.037	52.709	32.928	1.00	28.63	C
ATOM	2585	C	TYR	B	147	17.358	54.103	35.465	1.00	30.05	C
ATOM	2586	O	TYR	B	147	16.193	53.956	35.807	1.00	28.75	O
ATOM	2587	N	GLY	B	148	17.798	55.138	34.755	1.00	29.43	N
ATOM	2588	CA	GLY	B	148	16.932	56.128	34.129	1.00	28.51	C
ATOM	2589	C	GLY	B	148	17.420	56.491	32.744	1.00	27.31	C
ATOM	2590	O	GLY	B	148	18.584	56.748	32.561	1.00	28.08	O
ATOM	2591	N	GLY	B	149	16.520	56.562	31.774	1.00	27.92	N
ATOM	2592	CA	GLY	B	149	16.848	56.859	30.386	1.00	27.74	C
ATOM	2593	C	GLY	B	149	17.631	58.125	30.137	1.00	29.09	C
ATOM	2594	O	GLY	B	149	18.710	58.116	29.531	1.00	28.18	O
ATOM	2595	N	ARG	B	150	17.094	59.242	30.606	1.00	28.51	N
ATOM	2596	CA	ARG	B	150	17.786	60.502	30.402	1.00	29.89	C
ATOM	2597	CB	ARG	B	150	16.936	61.648	30.894	1.00	29.29	C
ATOM	2598	CG	ARG	B	150	15.555	61.609	30.347	1.00	29.05	C
ATOM	2599	CD	ARG	B	150	14.712	62.669	30.921	1.00	27.49	C
ATOM	2600	NE	ARG	B	150	13.617	63.047	30.075	1.00	29.61	N
ATOM	2601	CZ	ARG	B	150	12.720	63.995	30.396	1.00	35.25	C
ATOM	2602	NH1	ARG	B	150	12.837	64.666	31.550	1.00	37.29	N
ATOM	2603	NH2	ARG	B	150	11.714	64.275	29.582	1.00	29.60	N
ATOM	2604	C	ARG	B	150	19.088	60.486	31.167	1.00	30.73	C
ATOM	2605	O	ARG	B	150	20.067	61.118	30.769	1.00	31.66	O
ATOM	2606	N	ALA	B	151	19.092	59.735	32.252	1.00	32.24	N
ATOM	2607	CA	ALA	B	151	20.272	59.634	33.095	1.00	34.17	C
ATOM	2608	CB	ALA	B	151	20.003	58.720	34.292	1.00	34.28	C
ATOM	2609	C	ALA	B	151	21.341	59.049	32.161	1.00	35.42	C
ATOM	2610	O	ALA	B	151	22.412	59.620	31.976	1.00	34.27	O
ATOM	2611	N	GLU	B	152	21.000	57.941	31.521	1.00	36.24	N
ATOM	2612	CA	GLU	B	152	21.918	57.270	30.595	1.00	38.35	C
ATOM	2613	CB	GLU	B	152	21.258	56.007	30.035	1.00	37.96	C
ATOM	2614	CG	GLU	B	152	22.013	55.294	28.935	1.00	37.16	C
ATOM	2615	CD	GLU	B	152	21.185	54.136	28.433	1.00	38.11	C
ATOM	2616	OE1	GLU	B	152	19.944	54.284	28.388	1.00	36.93	O
ATOM	2617	OE2	GLU	B	152	21.749	53.074	28.121	1.00	38.21	O
ATOM	2618	C	GLU	B	152	22.425	58.155	29.462	1.00	38.89	C
ATOM	2619	O	GLU	B	152	23.617	58.221	29.193	1.00	39.54	O
ATOM	2620	N	ILE	B	153	21.525	58.851	28.810	1.00	39.76	N
ATOM	2621	CA	ILE	B	153	21.919	59.702	27.710	1.00	40.82	C
ATOM	2622	CB	ILE	B	153	20.663	60.272	27.043	1.00	39.72	C
ATOM	2623	CG1	ILE	B	153	19.934	59.159	26.284	1.00	39.48	C
ATOM	2624	CD1	ILE	B	153	18.513	59.508	25.951	1.00	35.50	C
ATOM	2625	CG2	ILE	B	153	21.014	61.438	26.140	1.00	40.83	C
ATOM	2626	C	ILE	B	153	22.853	60.813	28.176	1.00	42.89	C
ATOM	2627	O	ILE	B	153	23.666	61.320	27.391	1.00	42.67	O
ATOM	2628	N	THR	B	154	22.727	61.179	29.452	1.00	44.81	N
ATOM	2629	CA	THR	B	154	23.558	62.213	30.079	1.00	46.11	C
ATOM	2630	CB	THR	B	154	22.823	62.875	31.317	1.00	46.28	C
ATOM	2631	OG1	THR	B	154	21.542	63.364	30.907	1.00	44.13	O
ATOM	2632	CG2	THR	B	154	23.509	64.166	31.790	1.00	45.36	C
ATOM	2633	C	THR	B	154	24.945	61.679	30.407	1.00	47.49	C
ATOM	2634	O	THR	B	154	25.901	62.395	30.231	1.00	47.39	O
ATOM	2635	N	GLN	B	155	25.062	60.429	30.855	1.00	50.27	N
ATOM	2636	CA	GLN	B	155	26.382	59.807	31.002	1.00	53.77	C
ATOM	2637	CB	GLN	B	155	26.244	58.361	31.451	1.00	53.75	C
ATOM	2638	CG	GLN	B	155	26.267	58.175	32.933	1.00	56.56	C
ATOM	2639	CD	GLN	B	155	27.635	57.749	33.440	1.00	60.63	C

Figure 2-49

ATOM	2640	OE1	GLN	B	155	27.805	56.601	33.857	1.00	63.65	O
ATOM	2641	NE2	GLN	B	155	28.609	58.663	33.408	1.00	60.39	N
ATOM	2642	C	GLN	B	155	27.040	59.839	29.605	1.00	55.48	C
ATOM	2643	O	GLN	B	155	27.975	60.598	29.346	1.00	55.90	O
ATOM	2644	N	ALA	B	156	26.538	59.022	28.693	1.00	57.25	N
ATOM	2645	CA	ALA	B	156	27.069	59.058	27.358	1.00	58.99	C
ATOM	2646	CB	ALA	B	156	26.018	58.657	26.370	1.00	58.62	C
ATOM	2647	C	ALA	B	156	27.518	60.476	27.071	1.00	60.63	C
ATOM	2648	O	ALA	B	156	28.562	60.690	26.454	1.00	60.60	O
ATOM	2649	N	LEU	B	157	26.729	61.455	27.498	1.00	62.61	N
ATOM	2650	CA	LEU	B	157	27.065	62.825	27.148	1.00	64.88	C
ATOM	2651	CB	LEU	B	157	25.949	63.796	27.462	1.00	64.56	C
ATOM	2652	CG	LEU	B	157	26.551	65.194	27.243	1.00	64.56	C
ATOM	2653	CD1	LEU	B	157	27.709	65.137	26.253	1.00	61.80	C
ATOM	2654	CD2	LEU	B	157	25.506	66.230	26.812	1.00	62.35	C
ATOM	2655	C	LEU	B	157	28.328	63.304	27.827	1.00	66.61	C
ATOM	2656	O	LEU	B	157	29.202	63.885	27.198	1.00	67.29	O
ATOM	2657	N	LYS	B	158	28.428	63.086	29.123	1.00	68.48	N
ATOM	2658	CA	LYS	B	158	29.623	63.522	29.793	1.00	69.99	C
ATOM	2659	CB	LYS	B	158	29.526	63.297	31.296	1.00	69.95	C
ATOM	2660	CG	LYS	B	158	28.851	64.434	32.011	1.00	69.77	C
ATOM	2661	CD	LYS	B	158	28.862	64.197	33.503	1.00	71.28	C
ATOM	2662	CE	LYS	B	158	27.942	63.053	33.883	1.00	71.79	C
ATOM	2663	NZ	LYS	B	158	27.931	62.806	35.346	1.00	71.70	N
ATOM	2664	C	LYS	B	158	30.782	62.775	29.152	1.00	71.01	C
ATOM	2665	O	LYS	B	158	31.831	63.348	28.904	1.00	71.28	O
ATOM	2666	N	LEU	B	159	30.565	61.502	28.846	1.00	72.39	N
ATOM	2667	CA	LEU	B	159	31.592	60.685	28.213	1.00	73.32	C
ATOM	2668	CB	LEU	B	159	31.116	59.240	28.095	1.00	73.11	C
ATOM	2669	CG	LEU	B	159	31.403	58.413	29.346	1.00	72.67	C
ATOM	2670	CD1	LEU	B	159	30.897	56.972	29.199	1.00	71.96	C
ATOM	2671	CD2	LEU	B	159	32.897	58.467	29.643	1.00	72.16	C
ATOM	2672	C	LEU	B	159	32.046	61.219	26.851	1.00	74.07	C
ATOM	2673	O	LEU	B	159	33.244	61.395	26.628	1.00	74.08	O
ATOM	2674	N	ILE	B	160	31.095	61.478	25.957	1.00	75.23	N
ATOM	2675	CA	ILE	B	160	31.426	62.011	24.636	1.00	76.19	C
ATOM	2676	CB	ILE	B	160	30.161	62.238	23.775	1.00	75.85	C
ATOM	2677	CG1	ILE	B	160	29.585	60.920	23.266	1.00	75.77	C
ATOM	2678	CD1	ILE	B	160	28.305	61.094	22.479	1.00	73.85	C
ATOM	2679	CG2	ILE	B	160	30.487	63.109	22.584	1.00	75.41	C
ATOM	2680	C	ILE	B	160	32.160	63.332	24.790	1.00	77.38	C
ATOM	2681	O	ILE	B	160	33.201	63.557	24.173	1.00	77.95	O
ATOM	2682	N	SER	B	161	31.607	64.207	25.619	1.00	78.59	N
ATOM	2683	CA	SER	B	161	32.172	65.540	25.857	1.00	79.47	C
ATOM	2684	CB	SER	B	161	31.401	66.220	26.983	1.00	79.29	C
ATOM	2685	OG	SER	B	161	31.046	65.266	27.970	1.00	78.30	O
ATOM	2686	C	SER	B	161	33.674	65.551	26.174	1.00	80.29	C
ATOM	2687	O	SER	B	161	34.453	66.207	25.489	1.00	80.36	O
ATOM	2688	N	ALA	B	162	34.067	64.822	27.214	1.00	81.41	N
ATOM	2689	CA	ALA	B	162	35.460	64.763	27.647	1.00	82.47	C
ATOM	2690	CB	ALA	B	162	35.591	63.909	28.901	1.00	82.49	C
ATOM	2691	C	ALA	B	162	36.393	64.240	26.555	1.00	83.26	C
ATOM	2692	O	ALA	B	162	37.576	64.574	26.526	1.00	83.55	O
ATOM	2693	N	ASP	B	163	35.868	63.400	25.673	1.00	83.73	N
ATOM	2694	CA	ASP	B	163	36.679	62.881	24.596	1.00	83.98	C
ATOM	2695	CB	ASP	B	163	36.150	61.514	24.131	1.00	83.92	C
ATOM	2696	CG	ASP	B	163	36.485	60.375	25.111	1.00	83.93	C

Figure 2-50

ATOM	2697	OD1	ASP	B	163	37.138	60.635	26.145	1.00	83.40	O
ATOM	2698	OD2	ASP	B	163	36.141	59.183	24.921	1.00	84.57	O
ATOM	2699	C	ASP	B	163	36.713	63.939	23.478	1.00	84.23	C
ATOM	2700	O	ASP	B	163	37.714	64.099	22.776	1.00	84.28	O
ATOM	2701	N	VAL	B	164	35.630	64.695	23.349	1.00	84.36	N
ATOM	2702	CA	VAL	B	164	35.544	65.724	22.324	1.00	84.58	C
ATOM	2703	CB	VAL	B	164	34.089	66.193	22.099	1.00	84.83	C
ATOM	2704	CG1	VAL	B	164	33.968	67.688	22.319	1.00	85.23	C
ATOM	2705	CG2	VAL	B	164	33.619	65.840	20.699	1.00	85.23	C
ATOM	2706	C	VAL	B	164	36.370	66.935	22.684	1.00	84.55	C
ATOM	2707	O	VAL	B	164	36.623	67.793	21.849	1.00	84.30	O
ATOM	2708	N	LEU	B	165	36.783	67.024	23.937	1.00	84.79	N
ATOM	2709	CA	LEU	B	165	37.541	68.188	24.342	1.00	84.90	C
ATOM	2710	CB	LEU	B	165	37.267	68.561	25.799	1.00	85.00	C
ATOM	2711	CG	LEU	B	165	37.007	70.051	26.053	1.00	84.77	C
ATOM	2712	CD1	LEU	B	165	36.868	70.328	27.535	1.00	84.59	C
ATOM	2713	CD2	LEU	B	165	38.103	70.916	25.449	1.00	85.81	C
ATOM	2714	C	LEU	B	165	39.003	67.897	24.113	1.00	85.00	C
ATOM	2715	O	LEU	B	165	39.648	68.556	23.305	1.00	85.20	O
ATOM	2716	N	ASP	B	166	39.526	66.891	24.800	1.00	85.06	N
ATOM	2717	CA	ASP	B	166	40.918	66.539	24.604	1.00	85.10	C
ATOM	2718	CB	ASP	B	166	41.418	65.559	25.664	1.00	85.36	C
ATOM	2719	CG	ASP	B	166	40.338	65.125	26.606	1.00	85.64	C
ATOM	2720	OD1	ASP	B	166	39.606	66.007	27.113	1.00	86.80	O
ATOM	2721	OD2	ASP	B	166	40.161	63.925	26.908	1.00	85.92	O
ATOM	2722	C	ASP	B	166	41.202	66.056	23.182	1.00	85.02	C
ATOM	2723	O	ASP	B	166	42.276	65.529	22.896	1.00	85.58	O
ATOM	2724	N	ALA	B	167	40.225	66.225	22.301	1.00	84.59	N
ATOM	2725	CA	ALA	B	167	40.407	65.984	20.868	1.00	84.20	C
ATOM	2726	CB	ALA	B	167	41.682	66.678	20.366	1.00	84.31	C
ATOM	2727	C	ALA	B	167	40.350	64.555	20.333	1.00	83.75	C
ATOM	2728	O	ALA	B	167	40.792	64.320	19.205	1.00	83.32	O
ATOM	2729	N	LYS	B	168	39.807	63.611	21.101	1.00	83.40	N
ATOM	2730	CA	LYS	B	168	39.683	62.239	20.598	1.00	83.08	C
ATOM	2731	CB	LYS	B	168	39.289	61.245	21.692	1.00	83.18	C
ATOM	2732	CG	LYS	B	168	40.428	60.757	22.592	1.00	83.97	C
ATOM	2733	CD	LYS	B	168	40.006	59.558	23.455	1.00	85.17	C
ATOM	2734	CE	LYS	B	168	41.182	59.039	24.292	1.00	86.19	C
ATOM	2735	NZ	LYS	B	168	40.833	57.991	25.308	1.00	85.30	N
ATOM	2736	C	LYS	B	168	38.633	62.178	19.496	1.00	82.58	C
ATOM	2737	O	LYS	B	168	38.447	61.138	18.862	1.00	82.71	O
ATOM	2738	N	ILE	B	169	37.943	63.296	19.286	1.00	81.78	N
ATOM	2739	CA	ILE	B	169	36.876	63.359	18.306	1.00	81.19	C
ATOM	2740	CB	ILE	B	169	35.667	62.549	18.775	1.00	81.32	C
ATOM	2741	CG1	ILE	B	169	35.613	61.212	18.039	1.00	81.92	C
ATOM	2742	CD1	ILE	B	169	34.609	60.255	18.605	1.00	83.64	C
ATOM	2743	CG2	ILE	B	169	34.406	63.322	18.508	1.00	81.08	C
ATOM	2744	C	ILE	B	169	36.446	64.780	18.004	1.00	80.69	C
ATOM	2745	O	ILE	B	169	36.667	65.694	18.779	1.00	80.44	O
ATOM	2746	N	ASN	B	170	35.799	64.945	16.866	1.00	80.23	N
ATOM	2747	CA	ASN	B	170	35.403	66.255	16.408	1.00	79.75	C
ATOM	2748	CB	ASN	B	170	35.891	66.433	14.973	1.00	80.16	C
ATOM	2749	CG	ASN	B	170	37.376	66.109	14.827	1.00	81.48	C
ATOM	2750	OD1	ASN	B	170	37.949	66.212	13.745	1.00	82.57	O
ATOM	2751	ND2	ASN	B	170	38.004	65.718	15.931	1.00	82.88	N
ATOM	2752	C	ASN	B	170	33.899	66.493	16.544	1.00	78.97	C
ATOM	2753	O	ASN	B	170	33.142	65.575	16.863	1.00	78.81	O

Figure 2-51

ATOM	2754	N	PRO	B	171	33.476	67.730	16.298	1.00	78.08	N
ATOM	2755	CA	PRO	B	171	32.076	68.142	16.460	1.00	77.09	C
ATOM	2756	CB	PRO	B	171	32.177	69.665	16.331	1.00	77.28	C
ATOM	2757	CG	PRO	B	171	33.236	69.808	15.266	1.00	77.93	C
ATOM	2758	CD	PRO	B	171	34.303	68.852	15.807	1.00	78.34	C
ATOM	2759	C	PRO	B	171	31.165	67.587	15.367	1.00	75.62	C
ATOM	2760	O	PRO	B	171	29.954	67.507	15.564	1.00	75.49	O
ATOM	2761	N	GLY	B	172	31.751	67.231	14.226	1.00	74.09	N
ATOM	2762	CA	GLY	B	172	31.012	66.648	13.123	1.00	71.86	C
ATOM	2763	C	GLY	B	172	31.005	65.133	13.253	1.00	70.28	C
ATOM	2764	O	GLY	B	172	30.146	64.462	12.696	1.00	70.26	O
ATOM	2765	N	ASP	B	173	31.963	64.601	14.007	1.00	68.10	N
ATOM	2766	CA	ASP	B	173	32.085	63.168	14.211	1.00	66.31	C
ATOM	2767	CB	ASP	B	173	33.499	62.839	14.708	1.00	66.76	C
ATOM	2768	CG	ASP	B	173	34.524	62.738	13.568	1.00	68.92	C
ATOM	2769	OD1	ASP	B	173	35.256	61.726	13.544	1.00	71.61	O
ATOM	2770	OD2	ASP	B	173	34.687	63.600	12.660	1.00	70.82	O
ATOM	2771	C	ASP	B	173	31.024	62.574	15.172	1.00	64.53	C
ATOM	2772	O	ASP	B	173	31.123	61.411	15.558	1.00	64.44	O
ATOM	2773	N	ILE	B	174	30.030	63.376	15.567	1.00	61.91	N
ATOM	2774	CA	ILE	B	174	28.956	62.925	16.463	1.00	58.71	C
ATOM	2775	CB	ILE	B	174	28.456	64.084	17.332	1.00	59.10	C
ATOM	2776	CG1	ILE	B	174	29.578	64.616	18.220	1.00	59.36	C
ATOM	2777	CD1	ILE	B	174	30.014	63.625	19.306	1.00	62.60	C
ATOM	2778	CG2	ILE	B	174	27.263	63.635	18.200	1.00	59.02	C
ATOM	2779	C	ILE	B	174	27.803	62.363	15.646	1.00	56.29	C
ATOM	2780	O	ILE	B	174	27.248	63.041	14.775	1.00	55.52	O
ATOM	2781	N	THR	B	175	27.419	61.130	15.928	1.00	53.48	N
ATOM	2782	CA	THR	B	175	26.405	60.501	15.104	1.00	51.06	C
ATOM	2783	CB	THR	B	175	27.092	59.569	14.096	1.00	50.77	C
ATOM	2784	OG1	THR	B	175	27.849	58.601	14.832	1.00	49.92	O
ATOM	2785	CG2	THR	B	175	28.150	60.310	13.297	1.00	50.53	C
ATOM	2786	C	THR	B	175	25.485	59.651	15.935	1.00	49.17	C
ATOM	2787	O	THR	B	175	25.898	59.156	16.972	1.00	48.81	O
ATOM	2788	N	GLU	B	176	24.261	59.444	15.441	1.00	47.21	N
ATOM	2789	CA	GLU	B	176	23.341	58.535	16.088	1.00	45.87	C
ATOM	2790	CB	GLU	B	176	22.192	58.142	15.164	1.00	45.55	C
ATOM	2791	CG	GLU	B	176	21.247	59.267	14.812	1.00	46.48	C
ATOM	2792	CD	GLU	B	176	19.936	58.770	14.231	1.00	49.73	C
ATOM	2793	OE1	GLU	B	176	19.094	59.611	13.865	1.00	49.07	O
ATOM	2794	OE2	GLU	B	176	19.740	57.533	14.137	1.00	53.35	O
ATOM	2795	C	GLU	B	176	24.162	57.316	16.457	1.00	44.95	C
ATOM	2796	O	GLU	B	176	24.122	56.833	17.587	1.00	44.63	O
ATOM	2797	N	GLU	B	177	24.947	56.861	15.493	1.00	44.41	N
ATOM	2798	CA	GLU	B	177	25.797	55.711	15.642	1.00	44.34	C
ATOM	2799	CB	GLU	B	177	26.520	55.445	14.327	1.00	45.29	C
ATOM	2800	CG	GLU	B	177	25.652	55.556	13.075	1.00	47.64	C
ATOM	2801	CD	GLU	B	177	25.784	56.891	12.335	1.00	53.34	C
ATOM	2802	OE1	GLU	B	177	25.011	57.821	12.651	1.00	52.93	O
ATOM	2803	OE2	GLU	B	177	26.645	57.008	11.414	1.00	54.74	O
ATOM	2804	C	GLU	B	177	26.809	55.843	16.779	1.00	44.22	C
ATOM	2805	O	GLU	B	177	27.099	54.855	17.484	1.00	44.13	O
ATOM	2806	N	LEU	B	178	27.362	57.045	16.964	1.00	43.02	N
ATOM	2807	CA	LEU	B	178	28.331	57.254	18.034	1.00	41.80	C
ATOM	2808	CB	LEU	B	178	29.123	58.541	17.796	1.00	42.42	C
ATOM	2809	CG	LEU	B	178	30.430	58.762	18.556	1.00	43.29	C
ATOM	2810	CD1	LEU	B	178	31.346	59.640	17.728	1.00	44.45	C

Figure 2-52

ATOM	2811	CD2	LEU	B	178	30.196	59.399	19.943	1.00	43.68	C
ATOM	2812	C	LEU	B	178	27.727	57.267	19.434	1.00	40.62	C
ATOM	2813	O	LEU	B	178	28.315	56.739	20.375	1.00	39.80	O
ATOM	2814	N	ILE	B	179	26.571	57.900	19.591	1.00	40.25	N
ATOM	2815	CA	ILE	B	179	25.929	57.938	20.904	1.00	38.90	C
ATOM	2816	CB	ILE	B	179	24.648	58.757	20.832	1.00	39.65	C
ATOM	2817	CG1	ILE	B	179	24.975	60.172	20.387	1.00	40.14	C
ATOM	2818	CD1	ILE	B	179	23.883	60.812	19.568	1.00	46.93	C
ATOM	2819	CG2	ILE	B	179	23.921	58.775	22.195	1.00	38.03	C
ATOM	2820	C	ILE	B	179	25.670	56.517	21.402	1.00	38.46	C
ATOM	2821	O	ILE	B	179	25.936	56.193	22.559	1.00	38.57	O
ATOM	2822	N	GLY	B	180	25.197	55.653	20.510	1.00	38.04	N
ATOM	2823	CA	GLY	B	180	24.933	54.252	20.837	1.00	37.30	C
ATOM	2824	C	GLY	B	180	26.117	53.512	21.446	1.00	37.58	C
ATOM	2825	O	GLY	B	180	25.976	52.579	22.250	1.00	36.37	O
ATOM	2826	N	ASN	B	181	27.308	53.937	21.066	1.00	37.49	N
ATOM	2827	CA	ASN	B	181	28.498	53.372	21.659	1.00	37.70	C
ATOM	2828	CB	ASN	B	181	29.701	53.638	20.751	1.00	37.98	C
ATOM	2829	CG	ASN	B	181	29.714	52.734	19.519	1.00	38.45	C
ATOM	2830	OD1	ASN	B	181	29.772	51.507	19.640	1.00	39.24	O
ATOM	2831	ND2	ASN	B	181	29.689	53.336	18.338	1.00	36.29	N
ATOM	2832	C	ASN	B	181	28.720	53.924	23.069	1.00	37.65	C
ATOM	2833	O	ASN	B	181	29.366	53.295	23.908	1.00	37.69	O
ATOM	2834	N	TYR	B	182	28.168	55.099	23.357	1.00	37.81	N
ATOM	2835	CA	TYR	B	182	28.378	55.666	24.699	1.00	37.31	C
ATOM	2836	CB	TYR	B	182	28.546	57.170	24.646	1.00	37.85	C
ATOM	2837	CG	TYR	B	182	29.884	57.634	24.086	1.00	42.37	C
ATOM	2838	CD1	TYR	B	182	30.815	58.291	24.888	1.00	44.71	C
ATOM	2839	CE1	TYR	B	182	32.023	58.718	24.383	1.00	47.57	C
ATOM	2840	CZ	TYR	B	182	32.319	58.495	23.058	1.00	50.02	C
ATOM	2841	OH	TYR	B	182	33.524	58.908	22.532	1.00	52.92	O
ATOM	2842	CE2	TYR	B	182	31.408	57.856	22.242	1.00	49.59	C
ATOM	2843	CD2	TYR	B	182	30.206	57.428	22.756	1.00	45.47	C
ATOM	2844	C	TYR	B	182	27.312	55.310	25.705	1.00	36.58	C
ATOM	2845	O	TYR	B	182	27.479	55.595	26.881	1.00	35.20	O
ATOM	2846	N	LEU	B	183	26.230	54.655	25.262	1.00	36.32	N
ATOM	2847	CA	LEU	B	183	25.147	54.285	26.194	1.00	35.61	C
ATOM	2848	CB	LEU	B	183	23.793	54.278	25.491	1.00	35.22	C
ATOM	2849	CG	LEU	B	183	23.330	55.437	24.629	1.00	32.54	C
ATOM	2850	CD1	LEU	B	183	22.233	54.866	23.801	1.00	29.59	C
ATOM	2851	CD2	LEU	B	183	22.836	56.631	25.440	1.00	25.35	C
ATOM	2852	C	LEU	B	183	25.335	52.962	26.931	1.00	36.29	C
ATOM	2853	O	LEU	B	183	26.110	52.108	26.527	1.00	36.57	O
ATOM	2854	N	PHE	B	184	24.570	52.756	27.992	1.00	36.85	N
ATOM	2855	CA	PHE	B	184	24.749	51.564	28.807	1.00	37.67	C
ATOM	2856	CB	PHE	B	184	23.750	51.525	29.965	1.00	38.55	C
ATOM	2857	CG	PHE	B	184	24.003	52.600	31.007	1.00	39.11	C
ATOM	2858	CD1	PHE	B	184	25.247	52.741	31.577	1.00	39.61	C
ATOM	2859	CE1	PHE	B	184	25.496	53.718	32.509	1.00	40.64	C
ATOM	2860	CZ	PHE	B	184	24.487	54.578	32.889	1.00	42.99	C
ATOM	2861	CE2	PHE	B	184	23.242	54.454	32.322	1.00	42.29	C
ATOM	2862	CD2	PHE	B	184	23.008	53.460	31.392	1.00	40.64	C
ATOM	2863	C	PHE	B	184	24.705	50.287	28.020	1.00	37.99	C
ATOM	2864	O	PHE	B	184	25.462	49.345	28.310	1.00	38.32	O
ATOM	2865	N	THR	B	185	23.842	50.248	27.012	1.00	37.68	N
ATOM	2866	CA	THR	B	185	23.667	49.032	26.219	1.00	37.40	C
ATOM	2867	CB	THR	B	185	22.349	49.108	25.431	1.00	37.61	C

Figure 2-53

ATOM	2868	OG1	THR	B	185	22.219	50.398	24.825	1.00	35.20	O
ATOM	2869	CG2	THR	B	185	21.172	49.040	26.374	1.00	36.51	C
ATOM	2870	C	THR	B	185	24.820	48.674	25.269	1.00	37.87	C
ATOM	2871	O	THR	B	185	24.722	47.733	24.514	1.00	36.42	O
ATOM	2872	N	GLN	B	186	25.908	49.422	25.323	1.00	39.90	N
ATOM	2873	CA	GLN	B	186	27.021	49.223	24.397	1.00	42.95	C
ATOM	2874	CB	GLN	B	186	28.052	50.369	24.519	1.00	43.09	C
ATOM	2875	CG	GLN	B	186	28.908	50.366	25.827	1.00	46.28	C
ATOM	2876	CD	GLN	B	186	30.153	51.264	25.720	1.00	50.62	C
ATOM	2877	OE1	GLN	B	186	30.418	52.078	26.601	1.00	52.05	O
ATOM	2878	NE2	GLN	B	186	30.908	51.113	24.628	1.00	52.43	N
ATOM	2879	C	GLN	B	186	27.662	47.867	24.662	1.00	44.42	C
ATOM	2880	O	GLN	B	186	28.315	47.280	23.806	1.00	43.54	O
ATOM	2881	N	HIS	B	187	27.417	47.353	25.858	1.00	46.58	N
ATOM	2882	CA	HIS	B	187	27.994	46.089	26.236	1.00	48.59	C
ATOM	2883	CB	HIS	B	187	28.053	45.992	27.750	1.00	49.70	C
ATOM	2884	CG	HIS	B	187	29.094	46.887	28.344	1.00	52.97	C
ATOM	2885	ND1	HIS	B	187	29.027	47.362	29.634	1.00	56.44	N
ATOM	2886	CE1	HIS	B	187	30.078	48.126	29.875	1.00	58.94	C
ATOM	2887	NE2	HIS	B	187	30.823	48.166	28.784	1.00	59.96	N
ATOM	2888	CD2	HIS	B	187	30.227	47.401	27.810	1.00	56.13	C
ATOM	2889	C	HIS	B	187	27.268	44.923	25.613	1.00	48.75	C
ATOM	2890	O	HIS	B	187	27.592	43.773	25.886	1.00	48.49	O
ATOM	2891	N	LEU	B	188	26.302	45.231	24.753	1.00	48.70	N
ATOM	2892	CA	LEU	B	188	25.540	44.204	24.052	1.00	48.65	C
ATOM	2893	CB	LEU	B	188	24.030	44.496	24.047	1.00	48.09	C
ATOM	2894	CG	LEU	B	188	23.261	44.563	25.343	1.00	48.62	C
ATOM	2895	CD1	LEU	B	188	21.919	45.219	25.109	1.00	49.00	C
ATOM	2896	CD2	LEU	B	188	23.112	43.174	25.947	1.00	48.89	C
ATOM	2897	C	LEU	B	188	25.983	44.194	22.621	1.00	48.33	C
ATOM	2898	O	LEU	B	188	26.384	45.216	22.086	1.00	48.03	O
ATOM	2899	N	PRO	B	189	25.885	43.026	22.006	1.00	48.71	N
ATOM	2900	CA	PRO	B	189	26.149	42.868	20.577	1.00	48.97	C
ATOM	2901	CB	PRO	B	189	25.473	41.547	20.256	1.00	49.06	C
ATOM	2902	CG	PRO	B	189	25.682	40.751	21.516	1.00	49.02	C
ATOM	2903	CD	PRO	B	189	25.552	41.748	22.649	1.00	48.14	C
ATOM	2904	C	PRO	B	189	25.512	43.961	19.794	1.00	49.77	C
ATOM	2905	O	PRO	B	189	24.310	44.245	19.943	1.00	50.30	O
ATOM	2906	N	LYS	B	190	26.336	44.552	18.943	1.00	50.55	N
ATOM	2907	CA	LYS	B	190	25.990	45.674	18.090	1.00	50.78	C
ATOM	2908	CB	LYS	B	190	27.129	45.963	17.121	1.00	51.11	C
ATOM	2909	CG	LYS	B	190	27.106	47.389	16.573	1.00	53.72	C
ATOM	2910	CD	LYS	B	190	28.502	48.038	16.665	1.00	55.87	C
ATOM	2911	CE	LYS	B	190	28.414	49.364	17.403	1.00	57.89	C
ATOM	2912	NZ	LYS	B	190	29.724	50.061	17.583	1.00	58.75	N
ATOM	2913	C	LYS	B	190	24.697	45.608	17.297	1.00	50.84	C
ATOM	2914	O	LYS	B	190	24.273	46.625	16.732	1.00	52.58	O
ATOM	2915	N	ASP	B	191	24.056	44.460	17.191	1.00	48.98	N
ATOM	2916	CA	ASP	B	191	22.806	44.506	16.445	1.00	47.79	C
ATOM	2917	CB	ASP	B	191	22.899	43.798	15.079	1.00	49.82	C
ATOM	2918	CG	ASP	B	191	23.180	42.330	15.199	1.00	52.72	C
ATOM	2919	OD1	ASP	B	191	23.889	41.924	16.150	1.00	57.58	O
ATOM	2920	OD2	ASP	B	191	22.742	41.503	14.372	1.00	58.14	O
ATOM	2921	C	ASP	B	191	21.658	44.008	17.297	1.00	44.92	C
ATOM	2922	O	ASP	B	191	20.572	43.780	16.814	1.00	44.51	O
ATOM	2923	N	LEU	B	192	21.950	43.889	18.582	1.00	41.71	N
ATOM	2924	CA	LEU	B	192	21.027	43.461	19.603	1.00	39.23	C

Figure 2-54

ATOM	2925	CB	LEU	B	192	21.665	42.296	20.359	1.00	39.07	C
ATOM	2926	CG	LEU	B	192	21.720	41.037	19.494	1.00	39.27	C
ATOM	2927	CD1	LEU	B	192	22.614	39.968	20.119	1.00	38.96	C
ATOM	2928	CD2	LEU	B	192	20.319	40.527	19.276	1.00	34.91	C
ATOM	2929	C	LEU	B	192	20.763	44.592	20.618	1.00	37.08	C
ATOM	2930	O	LEU	B	192	20.044	44.391	21.598	1.00	35.61	O
ATOM	2931	N	ARG	B	193	21.365	45.755	20.388	1.00	33.95	N
ATOM	2932	CA	ARG	B	193	21.308	46.819	21.379	1.00	33.40	C
ATOM	2933	CB	ARG	B	193	22.367	47.883	21.078	1.00	33.10	C
ATOM	2934	CG	ARG	B	193	23.800	47.406	21.296	1.00	35.33	C
ATOM	2935	CD	ARG	B	193	24.806	48.166	20.464	1.00	37.62	C
ATOM	2936	NE	ARG	B	193	26.187	48.034	20.923	1.00	41.41	N
ATOM	2937	CZ	ARG	B	193	27.115	48.974	20.731	1.00	42.67	C
ATOM	2938	NH1	ARG	B	193	26.804	50.101	20.089	1.00	42.20	N
ATOM	2939	NH2	ARG	B	193	28.351	48.789	21.165	1.00	42.08	N
ATOM	2940	C	ARG	B	193	19.900	47.467	21.608	1.00	31.50	C
ATOM	2941	O	ARG	B	193	19.580	47.858	22.723	1.00	29.62	O
ATOM	2942	N	ASP	B	194	19.090	47.539	20.552	1.00	30.14	N
ATOM	2943	CA	ASP	B	194	17.767	48.161	20.630	1.00	30.31	C
ATOM	2944	CB	ASP	B	194	17.524	49.000	19.382	1.00	29.24	C
ATOM	2945	CG	ASP	B	194	18.584	50.049	19.182	1.00	30.33	C
ATOM	2946	OD1	ASP	B	194	19.284	50.364	20.171	1.00	30.13	O
ATOM	2947	OD2	ASP	B	194	18.804	50.603	18.074	1.00	31.57	O
ATOM	2948	C	ASP	B	194	16.638	47.114	20.775	1.00	30.32	C
ATOM	2949	O	ASP	B	194	16.547	46.142	20.028	1.00	29.72	O
ATOM	2950	N	PRO	B	195	15.725	47.323	21.691	1.00	30.25	N
ATOM	2951	CA	PRO	B	195	14.629	46.348	21.798	1.00	29.79	C
ATOM	2952	CB	PRO	B	195	13.812	46.888	22.959	1.00	30.01	C
ATOM	2953	CG	PRO	B	195	14.735	47.853	23.693	1.00	30.22	C
ATOM	2954	CD	PRO	B	195	15.633	48.424	22.663	1.00	29.49	C
ATOM	2955	C	PRO	B	195	13.762	46.298	20.545	1.00	29.54	C
ATOM	2956	O	PRO	B	195	13.408	47.322	20.002	1.00	28.98	O
ATOM	2957	N	ASP	B	196	13.385	45.124	20.083	1.00	30.10	N
ATOM	2958	CA	ASP	B	196	12.372	45.085	19.004	1.00	30.09	C
ATOM	2959	CB	ASP	B	196	12.485	43.833	18.144	1.00	30.33	C
ATOM	2960	CG	ASP	B	196	13.915	43.551	17.720	1.00	31.13	C
ATOM	2961	OD1	ASP	B	196	14.760	43.259	18.617	1.00	27.56	O
ATOM	2962	OD2	ASP	B	196	14.262	43.586	16.513	1.00	31.97	O
ATOM	2963	C	ASP	B	196	10.968	45.148	19.589	1.00	28.91	C
ATOM	2964	O	ASP	B	196	10.010	45.465	18.903	1.00	28.17	O
ATOM	2965	N	LEU	B	197	10.856	44.884	20.873	1.00	27.98	N
ATOM	2966	CA	LEU	B	197	9.542	44.867	21.491	1.00	28.22	C
ATOM	2967	CB	LEU	B	197	8.999	43.439	21.458	1.00	28.00	C
ATOM	2968	CG	LEU	B	197	7.706	43.275	22.238	1.00	28.91	C
ATOM	2969	CD1	LEU	B	197	6.702	44.126	21.515	1.00	28.80	C
ATOM	2970	CD2	LEU	B	197	7.264	41.806	22.240	1.00	32.85	C
ATOM	2971	C	LEU	B	197	9.621	45.296	22.940	1.00	27.53	C
ATOM	2972	O	LEU	B	197	10.490	44.838	23.640	1.00	28.57	O
ATOM	2973	N	ILE	B	198	8.737	46.166	23.406	1.00	27.47	N
ATOM	2974	CA	ILE	B	198	8.747	46.523	24.833	1.00	27.94	C
ATOM	2975	CB	ILE	B	198	9.064	48.020	25.090	1.00	27.09	C
ATOM	2976	CG1	ILE	B	198	10.415	48.436	24.570	1.00	27.97	C
ATOM	2977	CD1	ILE	B	198	10.627	49.971	24.724	1.00	21.93	C
ATOM	2978	CG2	ILE	B	198	9.129	48.325	26.572	1.00	27.77	C
ATOM	2979	C	ILE	B	198	7.380	46.164	25.401	1.00	27.73	C
ATOM	2980	O	ILE	B	198	6.361	46.415	24.760	1.00	28.10	O
ATOM	2981	N	ILE	B	199	7.372	45.572	26.582	1.00	28.20	N

Figure 2-55

ATOM	2982	CA	ILE	B	199	6.161	45.067	27.227	1.00	30.01	C
ATOM	2983	CB	ILE	B	199	6.287	43.533	27.489	1.00	29.81	C
ATOM	2984	CG1	ILE	B	199	5.984	42.705	26.241	1.00	31.77	C
ATOM	2985	CD1	ILE	B	199	6.594	41.293	26.320	1.00	29.80	C
ATOM	2986	CG2	ILE	B	199	5.402	43.066	28.628	1.00	30.47	C
ATOM	2987	C	ILE	B	199	6.001	45.774	28.577	1.00	30.85	C
ATOM	2988	O	ILE	B	199	6.971	45.847	29.365	1.00	29.82	O
ATOM	2989	N	ARG	B	200	4.817	46.348	28.813	1.00	32.15	N
ATOM	2990	CA	ARG	B	200	4.467	46.857	30.140	1.00	34.28	C
ATOM	2991	CB	ARG	B	200	4.061	48.326	30.141	1.00	35.43	C
ATOM	2992	CG	ARG	B	200	3.858	48.857	31.560	1.00	35.97	C
ATOM	2993	CD	ARG	B	200	4.198	50.332	31.788	1.00	34.16	C
ATOM	2994	NE	ARG	B	200	4.489	50.579	33.199	1.00	32.01	N
ATOM	2995	CZ	ARG	B	200	5.101	51.658	33.637	1.00	30.80	C
ATOM	2996	NH1	ARG	B	200	5.482	52.589	32.767	1.00	30.95	N
ATOM	2997	NH2	ARG	B	200	5.326	51.818	34.938	1.00	27.96	N
ATOM	2998	C	ARG	B	200	3.340	46.038	30.714	1.00	35.90	C
ATOM	2999	O	ARG	B	200	2.389	45.654	30.001	1.00	35.94	O
ATOM	3000	N	THR	B	201	3.467	45.714	31.991	1.00	37.78	N
ATOM	3001	CA	THR	B	201	2.428	44.973	32.677	1.00	39.06	C
ATOM	3002	CB	THR	B	201	3.045	43.811	33.477	1.00	39.73	C
ATOM	3003	OG1	THR	B	201	4.130	44.299	34.274	1.00	38.62	O
ATOM	3004	CG2	THR	B	201	3.707	42.757	32.553	1.00	37.89	C
ATOM	3005	C	THR	B	201	1.686	45.931	33.620	1.00	40.27	C
ATOM	3006	O	THR	B	201	2.101	47.078	33.800	1.00	39.89	O
ATOM	3007	N	SER	B	202	0.571	45.459	34.190	1.00	41.33	N
ATOM	3008	CA	SER	B	202	-0.179	46.212	35.198	1.00	41.26	C
ATOM	3009	CB	SER	B	202	0.779	46.785	36.242	1.00	42.01	C
ATOM	3010	OG	SER	B	202	0.117	47.723	37.080	1.00	43.68	O
ATOM	3011	C	SER	B	202	-1.033	47.341	34.679	1.00	41.35	C
ATOM	3012	O	SER	B	202	-1.297	48.294	35.419	1.00	41.03	O
ATOM	3013	N	GLY	B	203	-1.434	47.253	33.416	1.00	41.82	N
ATOM	3014	CA	GLY	B	203	-2.344	48.205	32.792	1.00	42.62	C
ATOM	3015	C	GLY	B	203	-1.871	49.626	32.588	1.00	44.02	C
ATOM	3016	O	GLY	B	203	-2.592	50.473	32.033	1.00	44.27	O
ATOM	3017	N	GLU	B	204	-0.661	49.923	33.033	1.00	44.75	N
ATOM	3018	CA	GLU	B	204	-0.165	51.265	32.863	1.00	45.29	C
ATOM	3019	CB	GLU	B	204	1.010	51.507	33.790	1.00	46.63	C
ATOM	3020	CG	GLU	B	204	0.594	52.102	35.130	1.00	51.35	C
ATOM	3021	CD	GLU	B	204	-0.614	53.033	34.995	1.00	57.96	C
ATOM	3022	OE1	GLU	B	204	-0.701	53.792	33.988	1.00	61.18	O
ATOM	3023	OE2	GLU	B	204	-1.496	52.992	35.886	1.00	60.52	O
ATOM	3024	C	GLU	B	204	0.218	51.458	31.416	1.00	44.98	C
ATOM	3025	O	GLU	B	204	0.692	50.520	30.764	1.00	45.73	O
ATOM	3026	N	LEU	B	205	-0.022	52.652	30.888	1.00	43.89	N
ATOM	3027	CA	LEU	B	205	0.332	52.938	29.511	1.00	42.79	C
ATOM	3028	CB	LEU	B	205	-0.899	53.330	28.676	1.00	43.82	C
ATOM	3029	CG	LEU	B	205	-2.059	52.397	28.287	1.00	44.28	C
ATOM	3030	CD1	LEU	B	205	-2.228	52.479	26.789	1.00	45.58	C
ATOM	3031	CD2	LEU	B	205	-1.871	50.937	28.696	1.00	45.48	C
ATOM	3032	C	LEU	B	205	1.366	54.058	29.387	1.00	41.73	C
ATOM	3033	O	LEU	B	205	0.993	55.161	29.050	1.00	40.67	O
ATOM	3034	N	ARG	B	206	2.641	53.753	29.661	1.00	41.29	N
ATOM	3035	CA	ARG	B	206	3.772	54.669	29.472	1.00	41.28	C
ATOM	3036	CB	ARG	B	206	3.632	55.911	30.342	1.00	41.75	C
ATOM	3037	CG	ARG	B	206	3.007	55.600	31.657	1.00	44.96	C
ATOM	3038	CD	ARG	B	206	2.999	56.730	32.674	1.00	50.66	C

Figure 2-56

ATOM	3039	NE	ARG	B	206	3.442	56.154	33.937	1.00	54.68	N
ATOM	3040	CZ	ARG	B	206	2.649	55.844	34.950	1.00	57.15	C
ATOM	3041	NH1	ARG	B	206	1.343	56.100	34.880	1.00	58.93	N
ATOM	3042	NH2	ARG	B	206	3.175	55.294	36.049	1.00	57.10	N
ATOM	3043	C	ARG	B	206	5.148	53.987	29.676	1.00	40.24	C
ATOM	3044	O	ARG	B	206	5.256	52.935	30.291	1.00	40.12	O
ATOM	3045	N	LEU	B	207	6.213	54.593	29.163	1.00	38.99	N
ATOM	3046	CA	LEU	B	207	7.516	53.927	29.237	1.00	37.52	C
ATOM	3047	CB	LEU	B	207	8.326	54.187	27.966	1.00	38.43	C
ATOM	3048	CG	LEU	B	207	7.702	53.613	26.688	1.00	39.19	C
ATOM	3049	CD1	LEU	B	207	6.876	52.352	27.039	1.00	39.48	C
ATOM	3050	CD2	LEU	B	207	6.862	54.659	25.992	1.00	38.80	C
ATOM	3051	C	LEU	B	207	8.360	54.256	30.478	1.00	35.94	C
ATOM	3052	O	LEU	B	207	9.351	53.571	30.761	1.00	36.00	O
ATOM	3053	N	SER	B	208	7.940	55.272	31.216	1.00	32.29	N
ATOM	3054	CA	SER	B	208	8.669	55.769	32.370	1.00	31.08	C
ATOM	3055	CB	SER	B	208	8.237	55.137	33.703	1.00	31.10	C
ATOM	3056	OG	SER	B	208	7.066	54.326	33.612	1.00	33.52	O
ATOM	3057	C	SER	B	208	10.210	55.779	32.257	1.00	29.82	C
ATOM	3058	O	SER	B	208	10.882	55.207	33.109	1.00	29.02	O
ATOM	3059	N	ASN	B	209	10.744	56.460	31.234	1.00	27.69	N
ATOM	3060	CA	ASN	B	209	12.174	56.668	31.145	1.00	26.65	C
ATOM	3061	CB	ASN	B	209	12.701	57.290	32.448	1.00	25.16	C
ATOM	3062	CG	ASN	B	209	13.899	58.205	32.222	1.00	23.61	C
ATOM	3063	OD1	ASN	B	209	14.216	58.600	31.091	1.00	17.08	O
ATOM	3064	ND2	ASN	B	209	14.559	58.562	33.310	1.00	19.10	N
ATOM	3065	C	ASN	B	209	12.941	55.385	30.917	1.00	26.65	C
ATOM	3066	O	ASN	B	209	14.142	55.326	31.235	1.00	26.38	O
ATOM	3067	N	PHE	B	210	12.254	54.368	30.397	1.00	25.05	N
ATOM	3068	CA	PHE	B	210	12.901	53.114	30.075	1.00	25.26	C
ATOM	3069	CB	PHE	B	210	11.979	51.932	30.402	1.00	25.24	C
ATOM	3070	CG	PHE	B	210	12.578	50.588	30.114	1.00	23.45	C
ATOM	3071	CD1	PHE	B	210	13.787	50.213	30.689	1.00	20.28	C
ATOM	3072	CE1	PHE	B	210	14.358	48.965	30.448	1.00	20.81	C
ATOM	3073	CZ	PHE	B	210	13.741	48.078	29.603	1.00	18.43	C
ATOM	3074	CE2	PHE	B	210	12.529	48.451	28.991	1.00	22.42	C
ATOM	3075	CD2	PHE	B	210	11.939	49.697	29.268	1.00	19.80	C
ATOM	3076	C	PHE	B	210	13.410	53.110	28.626	1.00	25.66	C
ATOM	3077	O	PHE	B	210	12.641	53.314	27.684	1.00	24.55	O
ATOM	3078	N	LEU	B	211	14.743	52.991	28.455	1.00	25.15	N
ATOM	3079	CA	LEU	B	211	15.360	52.938	27.104	1.00	23.55	C
ATOM	3080	CB	LEU	B	211	15.322	51.499	26.545	1.00	23.47	C
ATOM	3081	CG	LEU	B	211	16.010	50.295	27.276	1.00	23.61	C
ATOM	3082	CD1	LEU	B	211	15.689	48.927	26.579	1.00	16.55	C
ATOM	3083	CD2	LEU	B	211	17.585	50.441	27.478	1.00	19.41	C
ATOM	3084	C	LEU	B	211	14.838	53.917	26.042	1.00	23.33	C
ATOM	3085	O	LEU	B	211	14.597	53.550	24.910	1.00	23.32	O
ATOM	3086	N	PRO	B	212	14.709	55.187	26.357	1.00	23.83	N
ATOM	3087	CA	PRO	B	212	14.196	56.157	25.388	1.00	24.60	C
ATOM	3088	CB	PRO	B	212	14.383	57.473	26.114	1.00	24.91	C
ATOM	3089	CG	PRO	B	212	15.325	57.147	27.107	1.00	24.30	C
ATOM	3090	CD	PRO	B	212	14.952	55.807	27.650	1.00	23.09	C
ATOM	3091	C	PRO	B	212	14.905	56.227	24.053	1.00	25.49	C
ATOM	3092	O	PRO	B	212	14.271	56.286	22.994	1.00	24.07	O
ATOM	3093	N	TRP	B	213	16.233	56.308	24.111	1.00	25.92	N
ATOM	3094	CA	TRP	B	213	17.005	56.301	22.894	1.00	24.64	C
ATOM	3095	CB	TRP	B	213	18.482	56.453	23.228	1.00	24.46	C

Figure 2-57

ATOM	3096	CG	TRP	B	213	19.301	56.348	22.037	1.00	25.38	C
ATOM	3097	CD1	TRP	B	213	19.736	55.216	21.452	1.00	23.91	C
ATOM	3098	NE1	TRP	B	213	20.473	55.515	20.333	1.00	23.06	N
ATOM	3099	CE2	TRP	B	213	20.536	56.869	20.179	1.00	24.51	C
ATOM	3100	CD2	TRP	B	213	19.803	57.438	21.233	1.00	26.82	C
ATOM	3101	CE3	TRP	B	213	19.691	58.830	21.294	1.00	25.20	C
ATOM	3102	CZ3	TRP	B	213	20.297	59.590	20.293	1.00	29.32	C
ATOM	3103	CH2	TRP	B	213	21.019	58.981	19.268	1.00	28.57	C
ATOM	3104	CZ2	TRP	B	213	21.133	57.627	19.186	1.00	26.08	C
ATOM	3105	C	TRP	B	213	16.821	54.970	22.185	1.00	24.43	C
ATOM	3106	O	TRP	B	213	16.424	54.910	20.985	1.00	23.38	O
ATOM	3107	N	GLN	B	214	17.093	53.889	22.918	1.00	23.77	N
ATOM	3108	CA	GLN	B	214	17.159	52.588	22.241	1.00	24.01	C
ATOM	3109	CB	GLN	B	214	17.973	51.515	23.000	1.00	24.64	C
ATOM	3110	CG	GLN	B	214	19.311	52.032	23.640	1.00	23.98	C
ATOM	3111	CD	GLN	B	214	19.066	52.650	24.989	1.00	26.63	C
ATOM	3112	OE1	GLN	B	214	18.037	53.335	25.199	1.00	27.84	O
ATOM	3113	NE2	GLN	B	214	19.983	52.420	25.925	1.00	26.03	N
ATOM	3114	C	GLN	B	214	15.847	52.055	21.851	1.00	23.50	C
ATOM	3115	O	GLN	B	214	15.781	51.351	20.885	1.00	23.81	O
ATOM	3116	N	GLY	B	215	14.775	52.434	22.540	1.00	24.90	N
ATOM	3117	CA	GLY	B	215	13.454	51.881	22.232	1.00	24.47	C
ATOM	3118	C	GLY	B	215	12.644	52.797	21.294	1.00	25.00	C
ATOM	3119	O	GLY	B	215	11.436	52.582	21.068	1.00	23.84	O
ATOM	3120	N	ALA	B	216	13.305	53.783	20.703	1.00	24.52	N
ATOM	3121	CA	ALA	B	216	12.560	54.748	19.859	1.00	25.76	C
ATOM	3122	CB	ALA	B	216	13.470	55.834	19.339	1.00	24.87	C
ATOM	3123	C	ALA	B	216	11.747	54.144	18.721	1.00	26.66	C
ATOM	3124	O	ALA	B	216	10.717	54.715	18.302	1.00	27.55	O
ATOM	3125	N	TYR	B	217	12.166	52.989	18.225	1.00	26.49	N
ATOM	3126	CA	TYR	B	217	11.466	52.385	17.114	1.00	26.25	C
ATOM	3127	CB	TYR	B	217	12.406	52.145	15.931	1.00	26.48	C
ATOM	3128	CG	TYR	B	217	12.888	53.380	15.170	1.00	28.05	C
ATOM	3129	CD1	TYR	B	217	14.180	53.864	15.345	1.00	30.43	C
ATOM	3130	CE1	TYR	B	217	14.633	54.979	14.675	1.00	33.75	C
ATOM	3131	CZ	TYR	B	217	13.807	55.616	13.777	1.00	37.31	C
ATOM	3132	OH	TYR	B	217	14.294	56.707	13.094	1.00	41.79	O
ATOM	3133	CE2	TYR	B	217	12.512	55.160	13.568	1.00	34.54	C
ATOM	3134	CD2	TYR	B	217	12.063	54.040	14.265	1.00	31.01	C
ATOM	3135	C	TYR	B	217	10.798	51.078	17.486	1.00	26.26	C
ATOM	3136	O	TYR	B	217	10.359	50.330	16.609	1.00	26.74	O
ATOM	3137	N	SER	B	218	10.730	50.766	18.760	1.00	25.98	N
ATOM	3138	CA	SER	B	218	10.149	49.499	19.107	1.00	27.89	C
ATOM	3139	CB	SER	B	218	10.553	49.055	20.518	1.00	28.03	C
ATOM	3140	OG	SER	B	218	11.951	49.120	20.714	1.00	30.82	O
ATOM	3141	C	SER	B	218	8.636	49.417	19.035	1.00	28.20	C
ATOM	3142	O	SER	B	218	7.897	50.392	19.210	1.00	29.00	O
ATOM	3143	N	GLU	B	219	8.190	48.209	18.782	1.00	29.23	N
ATOM	3144	CA	GLU	B	219	6.795	47.857	18.948	1.00	29.73	C
ATOM	3145	CB	GLU	B	219	6.584	46.485	18.332	1.00	29.88	C
ATOM	3146	CG	GLU	B	219	6.776	46.481	16.815	1.00	31.45	C
ATOM	3147	CD	GLU	B	219	5.629	47.133	16.045	1.00	34.52	C
ATOM	3148	OE1	GLU	B	219	4.475	47.192	16.550	1.00	34.17	O
ATOM	3149	OE2	GLU	B	219	5.888	47.571	14.909	1.00	37.94	O
ATOM	3150	C	GLU	B	219	6.504	47.863	20.451	1.00	30.16	C
ATOM	3151	O	GLU	B	219	7.330	47.459	21.251	1.00	29.12	O
ATOM	3152	N	LEU	B	220	5.330	48.353	20.841	1.00	31.96	N

Figure 2-58

ATOM	3153	CA	LEU	B	220	4.974	48.437	22.239	1.00	33.04	C
ATOM	3154	CB	LEU	B	220	4.511	49.840	22.540	1.00	32.48	C
ATOM	3155	CG	LEU	B	220	5.575	50.878	22.258	1.00	32.18	C
ATOM	3156	CD1	LEU	B	220	4.948	52.269	22.265	1.00	34.30	C
ATOM	3157	CD2	LEU	B	220	6.683	50.762	23.287	1.00	31.19	C
ATOM	3158	C	LEU	B	220	3.864	47.449	22.539	1.00	34.63	C
ATOM	3159	O	LEU	B	220	3.001	47.211	21.693	1.00	36.62	O
ATOM	3160	N	TYR	B	221	3.856	46.893	23.741	1.00	34.97	N
ATOM	3161	CA	TYR	B	221	2.837	45.903	24.086	1.00	35.96	C
ATOM	3162	CB	TYR	B	221	3.384	44.470	23.944	1.00	35.97	C
ATOM	3163	CG	TYR	B	221	2.376	43.407	24.315	1.00	37.45	C
ATOM	3164	CD1	TYR	B	221	2.327	42.897	25.594	1.00	37.61	C
ATOM	3165	CE1	TYR	B	221	1.419	41.967	25.932	1.00	39.42	C
ATOM	3166	CZ	TYR	B	221	0.532	41.504	24.992	1.00	40.33	C
ATOM	3167	OH	TYR	B	221	-0.378	40.536	25.348	1.00	44.72	O
ATOM	3168	CE2	TYR	B	221	0.554	41.977	23.723	1.00	38.97	C
ATOM	3169	CD2	TYR	B	221	1.468	42.928	23.385	1.00	37.44	C
ATOM	3170	C	TYR	B	221	2.334	46.131	25.504	1.00	36.43	C
ATOM	3171	O	TYR	B	221	3.068	45.990	26.467	1.00	36.83	O
ATOM	3172	N	PHE	B	222	1.060	46.463	25.641	1.00	37.72	N
ATOM	3173	CA	PHE	B	222	0.518	46.755	26.953	1.00	38.21	C
ATOM	3174	CB	PHE	B	222	-0.196	48.099	26.873	1.00	37.79	C
ATOM	3175	CG	PHE	B	222	0.751	49.250	26.607	1.00	36.53	C
ATOM	3176	CD1	PHE	B	222	1.346	49.926	27.648	1.00	31.94	C
ATOM	3177	CE1	PHE	B	222	2.234	50.958	27.409	1.00	32.59	C
ATOM	3178	CZ	PHE	B	222	2.551	51.318	26.122	1.00	30.86	C
ATOM	3179	CE2	PHE	B	222	1.977	50.653	25.071	1.00	33.95	C
ATOM	3180	CD2	PHE	B	222	1.089	49.609	25.310	1.00	35.30	C
ATOM	3181	C	PHE	B	222	-0.384	45.642	27.434	1.00	39.33	C
ATOM	3182	O	PHE	B	222	-1.113	45.057	26.644	1.00	40.68	O
ATOM	3183	N	THR	B	223	-0.323	45.308	28.715	1.00	40.02	N
ATOM	3184	CA	THR	B	223	-1.231	44.302	29.247	1.00	40.45	C
ATOM	3185	CB	THR	B	223	-0.532	42.953	29.422	1.00	41.35	C
ATOM	3186	OG1	THR	B	223	-1.484	41.921	29.804	1.00	38.39	O
ATOM	3187	CG2	THR	B	223	0.469	43.048	30.588	1.00	39.03	C
ATOM	3188	C	THR	B	223	-1.751	44.746	30.596	1.00	41.40	C
ATOM	3189	O	THR	B	223	-1.077	45.454	31.347	1.00	41.71	O
ATOM	3190	N	ASP	B	224	-2.939	44.281	30.925	1.00	41.56	N
ATOM	3191	CA	ASP	B	224	-3.536	44.664	32.173	1.00	42.36	C
ATOM	3192	CB	ASP	B	224	-5.062	44.679	32.060	1.00	43.31	C
ATOM	3193	CG	ASP	B	224	-5.560	46.025	31.635	1.00	45.93	C
ATOM	3194	OD1	ASP	B	224	-6.790	46.241	31.478	1.00	49.99	O
ATOM	3195	OD2	ASP	B	224	-4.757	46.956	31.443	1.00	49.57	O
ATOM	3196	C	ASP	B	224	-3.039	43.786	33.277	1.00	41.32	C
ATOM	3197	O	ASP	B	224	-3.063	44.170	34.433	1.00	40.70	O
ATOM	3198	N	THR	B	225	-2.529	42.632	32.878	1.00	41.37	N
ATOM	3199	CA	THR	B	225	-1.965	41.627	33.771	1.00	41.23	C
ATOM	3200	CB	THR	B	225	-1.219	40.612	32.920	1.00	41.37	C
ATOM	3201	OG1	THR	B	225	-1.885	40.458	31.661	1.00	40.10	O
ATOM	3202	CG2	THR	B	225	-1.215	39.219	33.559	1.00	39.84	C
ATOM	3203	C	THR	B	225	-0.978	42.171	34.779	1.00	42.28	C
ATOM	3204	O	THR	B	225	-0.323	43.161	34.505	1.00	43.19	O
ATOM	3205	N	LEU	B	226	-0.816	41.465	35.906	1.00	42.49	N
ATOM	3206	CA	LEU	B	226	0.097	41.852	36.966	1.00	42.82	C
ATOM	3207	CB	LEU	B	226	-0.525	41.554	38.332	1.00	43.22	C
ATOM	3208	CG	LEU	B	226	-1.726	42.359	38.817	1.00	44.19	C
ATOM	3209	CD1	LEU	B	226	-1.741	42.303	40.326	1.00	47.33	C

Figure 2-59

ATOM	3210	CD2	LEU	B	226	-1.722	43.797	38.372	1.00	43.61	C
ATOM	3211	C	LEU	B	226	1.395	41.072	36.859	1.00	42.98	C
ATOM	3212	O	LEU	B	226	1.370	39.845	36.727	1.00	42.94	O
ATOM	3213	N	TRP	B	227	2.531	41.758	37.002	1.00	42.19	N
ATOM	3214	CA	TRP	B	227	3.814	41.098	36.750	1.00	41.89	C
ATOM	3215	CB	TRP	B	227	5.032	41.923	37.208	1.00	41.57	C
ATOM	3216	CG	TRP	B	227	6.302	41.200	36.998	1.00	38.01	C
ATOM	3217	CD1	TRP	B	227	7.200	40.823	37.950	1.00	38.24	C
ATOM	3218	NE1	TRP	B	227	8.262	40.159	37.381	1.00	36.72	N
ATOM	3219	CE2	TRP	B	227	8.050	40.077	36.034	1.00	37.27	C
ATOM	3220	CD2	TRP	B	227	6.818	40.720	35.760	1.00	39.16	C
ATOM	3221	CE3	TRP	B	227	6.379	40.784	34.433	1.00	40.35	C
ATOM	3222	CZ3	TRP	B	227	7.163	40.210	33.448	1.00	41.59	C
ATOM	3223	CH2	TRP	B	227	8.369	39.569	33.766	1.00	39.67	C
ATOM	3224	CZ2	TRP	B	227	8.825	39.498	35.051	1.00	37.32	C
ATOM	3225	C	TRP	B	227	3.930	39.669	37.245	1.00	42.56	C
ATOM	3226	O	TRP	B	227	4.289	38.795	36.484	1.00	42.59	O
ATOM	3227	N	PRO	B	228	3.666	39.421	38.523	1.00	43.61	N
ATOM	3228	CA	PRO	B	228	3.784	38.054	39.064	1.00	43.84	C
ATOM	3229	CB	PRO	B	228	3.373	38.214	40.528	1.00	44.07	C
ATOM	3230	CG	PRO	B	228	3.621	39.657	40.811	1.00	44.34	C
ATOM	3231	CD	PRO	B	228	3.250	40.399	39.542	1.00	43.00	C
ATOM	3232	C	PRO	B	228	2.881	37.038	38.338	1.00	44.25	C
ATOM	3233	O	PRO	B	228	3.113	35.848	38.484	1.00	44.28	O
ATOM	3234	N	ASP	B	229	1.895	37.492	37.561	1.00	44.69	N
ATOM	3235	CA	ASP	B	229	1.104	36.564	36.740	1.00	45.13	C
ATOM	3236	CB	ASP	B	229	-0.379	36.929	36.714	1.00	44.75	C
ATOM	3237	CG	ASP	B	229	-1.017	36.800	38.073	1.00	44.76	C
ATOM	3238	OD1	ASP	B	229	-0.550	35.935	38.856	1.00	43.39	O
ATOM	3239	OD2	ASP	B	229	-1.968	37.523	38.442	1.00	43.60	O
ATOM	3240	C	ASP	B	229	1.621	36.487	35.308	1.00	45.87	C
ATOM	3241	O	ASP	B	229	1.113	35.674	34.499	1.00	46.14	O
ATOM	3242	N	PHE	B	230	2.606	37.331	34.975	1.00	44.87	N
ATOM	3243	CA	PHE	B	230	3.173	37.273	33.639	1.00	43.94	C
ATOM	3244	CB	PHE	B	230	4.002	38.531	33.296	1.00	43.27	C
ATOM	3245	CG	PHE	B	230	4.175	38.744	31.819	1.00	40.87	C
ATOM	3246	CD1	PHE	B	230	5.151	38.060	31.122	1.00	37.77	C
ATOM	3247	CE1	PHE	B	230	5.294	38.217	29.773	1.00	34.89	C
ATOM	3248	CZ	PHE	B	230	4.460	39.054	29.078	1.00	34.79	C
ATOM	3249	CE2	PHE	B	230	3.471	39.743	29.740	1.00	37.11	C
ATOM	3250	CD2	PHE	B	230	3.321	39.577	31.113	1.00	39.77	C
ATOM	3251	C	PHE	B	230	4.034	36.025	33.590	1.00	44.31	C
ATOM	3252	O	PHE	B	230	4.981	35.893	34.335	1.00	43.68	O
ATOM	3253	N	ASP	B	231	3.691	35.106	32.702	1.00	45.12	N
ATOM	3254	CA	ASP	B	231	4.399	33.840	32.583	1.00	45.61	C
ATOM	3255	CB	ASP	B	231	3.566	32.729	33.229	1.00	45.86	C
ATOM	3256	CG	ASP	B	231	2.183	32.627	32.635	1.00	46.10	C
ATOM	3257	OD1	ASP	B	231	2.034	32.915	31.425	1.00	42.50	O
ATOM	3258	OD2	ASP	B	231	1.188	32.271	33.310	1.00	46.84	O
ATOM	3259	C	ASP	B	231	4.662	33.482	31.125	1.00	45.96	C
ATOM	3260	O	ASP	B	231	4.371	34.265	30.228	1.00	46.21	O
ATOM	3261	N	GLU	B	232	5.187	32.284	30.895	1.00	46.12	N
ATOM	3262	CA	GLU	B	232	5.508	31.836	29.553	1.00	46.59	C
ATOM	3263	CB	GLU	B	232	6.014	30.391	29.545	1.00	46.85	C
ATOM	3264	CG	GLU	B	232	6.250	29.884	28.130	1.00	47.86	C
ATOM	3265	CD	GLU	B	232	6.843	28.495	28.106	1.00	51.41	C
ATOM	3266	OE1	GLU	B	232	7.080	27.965	26.993	1.00	52.42	O

Figure 2-60

ATOM	3267	OE2	GLU	B	232	7.068	27.940	29.213	1.00	52.82	O
ATOM	3268	C	GLU	B	232	4.363	31.980	28.569	1.00	46.41	C
ATOM	3269	O	GLU	B	232	4.578	32.364	27.426	1.00	46.40	O
ATOM	3270	N	ALA	B	233	3.146	31.666	28.991	1.00	46.36	N
ATOM	3271	CA	ALA	B	233	2.019	31.817	28.074	1.00	46.32	C
ATOM	3272	CB	ALA	B	233	0.760	31.217	28.646	1.00	46.83	C
ATOM	3273	C	ALA	B	233	1.805	33.279	27.764	1.00	46.33	C
ATOM	3274	O	ALA	B	233	1.423	33.630	26.652	1.00	46.81	O
ATOM	3275	N	ALA	B	234	2.053	34.124	28.756	1.00	46.14	N
ATOM	3276	CA	ALA	B	234	1.950	35.564	28.607	1.00	45.96	C
ATOM	3277	CB	ALA	B	234	2.117	36.244	29.948	1.00	45.69	C
ATOM	3278	C	ALA	B	234	3.026	36.058	27.643	1.00	46.02	C
ATOM	3279	O	ALA	B	234	2.754	36.859	26.750	1.00	45.94	O
ATOM	3280	N	LEU	B	235	4.245	35.582	27.834	1.00	45.51	N
ATOM	3281	CA	LEU	B	235	5.335	35.974	26.970	1.00	45.96	C
ATOM	3282	CB	LEU	B	235	6.608	35.228	27.353	1.00	45.21	C
ATOM	3283	CG	LEU	B	235	7.829	35.676	26.564	1.00	46.23	C
ATOM	3284	CD1	LEU	B	235	8.143	37.128	26.929	1.00	44.35	C
ATOM	3285	CD2	LEU	B	235	9.035	34.761	26.822	1.00	43.84	C
ATOM	3286	C	LEU	B	235	4.962	35.709	25.513	1.00	46.73	C
ATOM	3287	O	LEU	B	235	5.058	36.612	24.665	1.00	46.82	O
ATOM	3288	N	GLN	B	236	4.488	34.495	25.229	1.00	47.36	N
ATOM	3289	CA	GLN	B	236	4.155	34.118	23.851	1.00	48.92	C
ATOM	3290	CB	GLN	B	236	3.961	32.587	23.688	1.00	50.34	C
ATOM	3291	CG	GLN	B	236	3.815	32.122	22.207	1.00	54.21	C
ATOM	3292	CD	GLN	B	236	3.256	30.682	22.042	1.00	60.15	C
ATOM	3293	OE1	GLN	B	236	3.358	29.853	22.961	1.00	61.66	O
ATOM	3294	NE2	GLN	B	236	2.672	30.394	20.864	1.00	60.72	N
ATOM	3295	C	GLN	B	236	2.965	34.896	23.276	1.00	48.45	C
ATOM	3296	O	GLN	B	236	2.919	35.137	22.072	1.00	47.51	O
ATOM	3297	N	GLU	B	237	2.016	35.306	24.119	1.00	48.40	N
ATOM	3298	CA	GLU	B	237	0.889	36.093	23.599	1.00	48.84	C
ATOM	3299	CB	GLU	B	237	-0.246	36.271	24.623	1.00	49.21	C
ATOM	3300	CG	GLU	B	237	-1.556	36.779	24.015	1.00	52.86	C
ATOM	3301	CD	GLU	B	237	-2.698	37.035	25.032	1.00	56.95	C
ATOM	3302	OE1	GLU	B	237	-3.671	37.760	24.671	1.00	58.46	O
ATOM	3303	OE2	GLU	B	237	-2.642	36.527	26.177	1.00	55.69	O
ATOM	3304	C	GLU	B	237	1.397	37.440	23.111	1.00	47.74	C
ATOM	3305	O	GLU	B	237	0.877	38.008	22.169	1.00	47.94	O
ATOM	3306	N	ALA	B	238	2.434	37.953	23.747	1.00	47.20	N
ATOM	3307	CA	ALA	B	238	2.993	39.213	23.297	1.00	46.53	C
ATOM	3308	CB	ALA	B	238	3.869	39.844	24.362	1.00	45.61	C
ATOM	3309	C	ALA	B	238	3.765	38.934	22.012	1.00	46.05	C
ATOM	3310	O	ALA	B	238	3.634	39.651	21.039	1.00	45.12	O
ATOM	3311	N	ILE	B	239	4.554	37.869	21.998	1.00	46.79	N
ATOM	3312	CA	ILE	B	239	5.255	37.538	20.771	1.00	47.47	C
ATOM	3313	CB	ILE	B	239	6.021	36.253	20.920	1.00	47.51	C
ATOM	3314	CG1	ILE	B	239	7.203	36.483	21.849	1.00	47.99	C
ATOM	3315	CD1	ILE	B	239	7.913	35.251	22.191	1.00	49.20	C
ATOM	3316	CG2	ILE	B	239	6.505	35.795	19.589	1.00	47.14	C
ATOM	3317	C	ILE	B	239	4.251	37.437	19.630	1.00	47.96	C
ATOM	3318	O	ILE	B	239	4.449	38.026	18.572	1.00	47.90	O
ATOM	3319	N	LEU	B	240	3.156	36.721	19.879	1.00	48.95	N
ATOM	3320	CA	LEU	B	240	2.093	36.511	18.902	1.00	49.42	C
ATOM	3321	CB	LEU	B	240	0.910	35.819	19.576	1.00	49.84	C
ATOM	3322	CG	LEU	B	240	0.096	34.794	18.759	1.00	52.28	C
ATOM	3323	CD1	LEU	B	240	-0.376	33.632	19.658	1.00	52.89	C

Figure 2-61

ATOM	3324	CD2	LEU	B	240	-1.090	35.430	18.001	1.00	54.23	C
ATOM	3325	C	LEU	B	240	1.647	37.850	18.320	1.00	49.69	C
ATOM	3326	O	LEU	B	240	1.601	38.023	17.097	1.00	49.49	O
ATOM	3327	N	ALA	B	241	1.342	38.802	19.204	1.00	49.32	N
ATOM	3328	CA	ALA	B	241	0.867	40.115	18.779	1.00	49.30	C
ATOM	3329	CB	ALA	B	241	0.419	40.911	19.974	1.00	49.37	C
ATOM	3330	C	ALA	B	241	1.934	40.877	17.998	1.00	49.21	C
ATOM	3331	O	ALA	B	241	1.639	41.642	17.071	1.00	48.88	O
ATOM	3332	N	TYR	B	242	3.184	40.656	18.376	1.00	49.22	N
ATOM	3333	CA	TYR	B	242	4.291	41.293	17.690	1.00	48.81	C
ATOM	3334	CB	TYR	B	242	5.571	40.900	18.362	1.00	47.16	C
ATOM	3335	CG	TYR	B	242	6.803	41.306	17.631	1.00	45.05	C
ATOM	3336	CD1	TYR	B	242	7.345	42.561	17.823	1.00	43.05	C
ATOM	3337	CE1	TYR	B	242	8.490	42.937	17.203	1.00	42.67	C
ATOM	3338	CZ	TYR	B	242	9.121	42.065	16.337	1.00	43.46	C
ATOM	3339	OH	TYR	B	242	10.274	42.491	15.726	1.00	43.87	O
ATOM	3340	CE2	TYR	B	242	8.607	40.800	16.114	1.00	43.33	C
ATOM	3341	CD2	TYR	B	242	7.459	40.422	16.771	1.00	43.67	C
ATOM	3342	C	TYR	B	242	4.319	40.854	16.238	1.00	49.92	C
ATOM	3343	O	TYR	B	242	4.527	41.662	15.345	1.00	49.55	O
ATOM	3344	N	ASN	B	243	4.080	39.574	15.995	1.00	51.50	N
ATOM	3345	CA	ASN	B	243	4.149	39.069	14.629	1.00	53.67	C
ATOM	3346	CB	ASN	B	243	4.254	37.561	14.629	1.00	54.26	C
ATOM	3347	CG	ASN	B	243	5.405	37.090	15.438	1.00	55.57	C
ATOM	3348	OD1	ASN	B	243	6.521	37.557	15.252	1.00	57.46	O
ATOM	3349	ND2	ASN	B	243	5.149	36.178	16.368	1.00	57.92	N
ATOM	3350	C	ASN	B	243	2.990	39.501	13.769	1.00	54.45	C
ATOM	3351	O	ASN	B	243	3.081	39.488	12.554	1.00	54.58	O
ATOM	3352	N	ALA	B	244	1.899	39.887	14.412	1.00	55.73	N
ATOM	3353	CA	ALA	B	244	0.722	40.356	13.702	1.00	56.68	C
ATOM	3354	CB	ALA	B	244	-0.500	40.194	14.577	1.00	56.79	C
ATOM	3355	C	ALA	B	244	0.855	41.809	13.251	1.00	57.13	C
ATOM	3356	O	ALA	B	244	0.026	42.313	12.493	1.00	57.97	O
ATOM	3357	N	ARG	B	245	1.881	42.508	13.717	1.00	57.42	N
ATOM	3358	CA	ARG	B	245	2.031	43.897	13.297	1.00	57.08	C
ATOM	3359	CB	ARG	B	245	2.860	44.683	14.310	1.00	56.74	C
ATOM	3360	CG	ARG	B	245	2.424	44.463	15.764	1.00	54.80	C
ATOM	3361	CD	ARG	B	245	1.517	45.531	16.374	1.00	50.66	C
ATOM	3362	NE	ARG	B	245	1.320	45.300	17.799	1.00	44.27	N
ATOM	3363	CZ	ARG	B	245	1.949	45.969	18.762	1.00	43.68	C
ATOM	3364	NH1	ARG	B	245	2.816	46.947	18.458	1.00	41.51	N
ATOM	3365	NH2	ARG	B	245	1.707	45.668	20.039	1.00	39.80	N
ATOM	3366	C	ARG	B	245	2.628	43.964	11.881	1.00	57.51	C
ATOM	3367	O	ARG	B	245	3.221	43.027	11.348	1.00	57.54	O
ATOM	3368	OXT	ARG	B	245	2.532	44.951	11.150	1.00	57.67	N
ATOM	3369	O	HOH	W	301	14.224	63.821	21.870	1.00	24.85	O
ATOM	3370	O	HOH	W	302	13.835	51.188	18.590	1.00	26.15	O
ATOM	3371	O	HOH	W	303	23.569	51.055	22.560	1.00	24.42	O
ATOM	3372	O	HOH	W	304	-15.712	67.436	16.063	1.00	25.93	O
ATOM	3373	O	HOH	W	305	11.511	56.212	23.136	1.00	25.78	O
ATOM	3374	O	HOH	W	306	28.260	37.972	32.519	1.00	25.10	O
ATOM	3375	O	HOH	W	307	14.925	65.146	33.299	1.00	30.46	O
ATOM	3376	O	HOH	W	308	-1.174	56.855	5.192	1.00	32.48	O
ATOM	3377	O	HOH	W	309	15.043	68.104	30.149	1.00	32.01	O
ATOM	3378	O	HOH	W	310	13.485	71.100	25.434	1.00	30.88	O
ATOM	3379	O	HOH	W	311	2.368	51.634	38.578	1.00	37.66	O
ATOM	3380	O	HOH	W	312	22.232	53.935	17.949	1.00	29.18	O

Figure 2-62

ATOM	3381	O	HOH	W	313	1.084	65.125	33.294	1.00	28.16	O
ATOM	3382	O	HOH	W	314	11.098	56.123	27.799	1.00	33.88	O
ATOM	3383	O	HOH	W	315	14.222	27.778	19.716	1.00	41.03	O
ATOM	3384	O	HOH	W	316	19.205	25.420	41.011	1.00	38.62	O
ATOM	3385	O	HOH	W	317	17.071	57.013	13.573	1.00	37.65	O
ATOM	3386	O	HOH	W	318	8.332	59.814	-2.926	1.00	43.12	O
ATOM	3387	O	HOH	W	319	18.956	55.692	39.467	1.00	37.89	O
ATOM	3388	O	HOH	W	320	34.108	34.471	35.840	1.00	30.97	O
ATOM	3389	O	HOH	W	321	-13.652	71.852	16.113	1.00	30.06	O
ATOM	3390	O	HOH	W	322	26.871	26.672	39.838	1.00	38.32	O
ATOM	3391	O	HOH	W	323	2.769	79.918	25.863	1.00	37.33	O
ATOM	3392	O	HOH	W	324	31.076	56.263	14.431	1.00	40.35	O
ATOM	3393	O	HOH	W	325	21.917	35.624	23.478	1.00	37.60	O
ATOM	3394	O	HOH	W	326	-0.796	69.107	32.281	1.00	32.78	O
ATOM	3395	O	HOH	W	327	10.645	57.769	25.185	1.00	42.01	O
ATOM	3396	O	HOH	W	328	8.192	53.433	19.657	1.00	38.80	O
ATOM	3397	O	HOH	W	329	17.440	58.463	36.930	1.00	40.46	O
ATOM	3398	O	HOH	W	330	33.910	33.489	27.352	1.00	41.76	O
ATOM	3399	O	HOH	W	331	29.730	34.901	26.421	1.00	46.55	O
ATOM	3400	O	HOH	W	332	33.686	39.607	34.444	1.00	41.77	O
ATOM	3401	O	HOH	W	333	14.933	40.936	15.748	1.00	47.38	O
ATOM	3402	O	HOH	W	334	-4.897	43.250	28.713	1.00	47.40	O
ATOM	3403	O	HOH	W	335	4.887	86.032	22.815	1.00	47.19	O
ATOM	3404	O	HOH	W	336	7.099	80.807	22.742	1.00	47.80	O
ATOM	3405	O	HOH	W	337	-1.464	38.069	21.001	1.00	51.91	O
ATOM	3406	O	HOH	W	338	16.440	61.818	37.239	1.00	49.88	O
ATOM	3407	O	HOH	W	339	14.708	60.696	11.364	1.00	51.81	O
ATOM	3408	O	HOH	W	340	6.610	90.189	21.258	1.00	37.51	O
ATOM	3409	O	HOH	W	341	9.826	29.674	37.961	1.00	57.75	O
ATOM	3410	O	HOH	W	342	5.079	62.992	-4.894	1.00	55.05	O
ATOM	3411	O	HOH	W	343	-4.884	51.667	19.085	1.00	78.31	O
ATOM	3412	O	HOH	W	344	18.432	32.224	23.475	1.00	48.07	O
ATOM	3413	O	HOH	W	345	5.216	66.664	-6.536	1.00	48.32	O
ATOM	3414	O	HOH	W	346	33.325	53.793	25.367	1.00	47.49	O
ATOM	3415	O	HOH	W	347	-3.753	79.905	26.514	1.00	52.44	O
ATOM	3416	O	HOH	W	348	14.825	52.163	11.399	1.00	65.10	O
ATOM	3417	O	HOH	W	349	18.450	22.964	36.956	1.00	54.06	O
ATOM	3418	O	HOH	W	350	7.522	41.595	13.069	1.00	57.75	O
ATOM	3419	O	HOH	W	351	-1.912	65.885	8.146	1.00	55.79	O
ATOM	3420	O	HOH	W	352	16.951	35.926	16.983	1.00	46.68	O
ATOM	3421	O	HOH	W	353	21.249	74.367	32.621	1.00	60.16	O
ATOM	3422	O	HOH	W	354	-9.102	50.743	20.528	1.00	54.04	O
ATOM	3423	O	HOH	W	355	9.904	55.128	10.304	1.00	57.95	O
ATOM	3424	O	HOH	W	356	-0.207	46.679	24.030	1.00	45.82	O
ATOM	3425	O	HOH	W	357	15.796	27.714	41.334	1.00	51.32	O
ATOM	3426	O	HOH	W	358	0.149	39.250	26.948	1.00	53.35	O
ATOM	3427	O	HOH	W	359	24.437	60.006	35.667	1.00	55.80	O
ATOM	3428	O	HOH	W	360	4.287	58.978	10.631	1.00	60.99	O
ATOM	3429	O	HOH	W	361	8.643	80.111	20.686	1.00	43.53	O
ATOM	3430	O	HOH	W	362	0.496	30.071	31.543	1.00	60.54	O
ATOM	3431	O	HOH	W	363	9.626	41.652	39.466	1.00	47.51	O
ATOM	3432	O	HOH	W	364	11.994	44.893	15.026	1.00	60.32	O
ATOM	3433	O	HOH	W	365	8.116	62.065	-6.689	1.00	55.61	O
ATOM	3434	O	HOH	W	366	25.510	27.453	22.298	1.00	60.54	O
ATOM	3435	O	HOH	W	367	3.522	65.832	-0.412	1.00	54.77	O
ATOM	3436	O	HOH	W	368	5.439	70.882	0.738	1.00	119.10	O
ATOM	3437	O	HOH	W	369	3.612	66.583	-4.462	1.00	101.11	O

Figure 2-63

ATOM	3438	O	HOH W 370	3.599	68.176	-1.771	1.00	58.59	O
ATOM	3439	O	HOH W 371	-3.296	37.480	40.877	1.00	88.62	O
ATOM	3440	O	HOH W 372	-3.269	43.168	25.582	1.00	51.34	O
ATOM	3441	O	HOH W 373	5.407	57.341	49.505	1.00	66.80	O
ATOM	3442	O	HOH W 374	-2.152	53.030	0.450	1.00	72.53	O
ATOM	3443	O	HOH W 375	-18.889	71.091	19.576	1.00	67.66	O
ATOM	3444	O	HOH W 376	12.970	51.434	7.745	1.00	65.79	O
ATOM	3445	O	HOH W 377	12.605	51.601	10.522	1.00	68.28	O
ATOM	3446	O	HOH W 378	-13.428	79.224	14.167	1.00	46.23	O
ATOM	3447	O	HOH W 379	-14.981	80.343	9.822	1.00	76.04	O
ATOM	3448	O	HOH W 380	18.998	77.536	21.320	1.00	47.42	O
ATOM	3449	O	HOH W 381	6.160	57.027	28.262	1.00	35.89	O
ATOM	3450	O	HOH W 382	-8.580	53.333	22.637	1.00	42.88	O
ATOM	3451	O	HOH W 383	-11.820	49.780	17.120	1.00	52.37	O
ATOM	3452	O	HOH W 384	-14.370	58.966	14.957	1.00	58.98	O
ATOM	3453	O	HOH W 385	1.543	47.051	9.068	1.00	42.04	O
ATOM	3454	O	HOH W 386	-1.020	43.926	9.575	1.00	56.35	O
ATOM	3455	O	HOH W 387	1.068	48.111	13.182	1.00	55.61	O
ATOM	3456	O	HOH W 388	-2.342	67.388	33.510	1.00	40.51	O
ATOM	3457	O	HOH W 389	1.635	69.559	32.785	1.00	39.45	O
ATOM	3458	O	HOH W 390	13.760	76.563	35.278	1.00	53.74	O
ATOM	3459	O	HOH W 391	10.776	79.077	25.620	1.00	63.64	O
ATOM	3460	O	HOH W 392	21.224	62.700	35.605	1.00	33.68	O
ATOM	3461	O	HOH W 393	24.451	78.202	22.211	1.00	44.88	O
ATOM	3462	O	HOH W 394	31.555	79.671	18.577	1.00	54.65	O
ATOM	3463	O	HOH W 395	7.578	63.259	4.412	1.00	46.12	O
ATOM	3464	O	HOH W 396	9.894	49.886	38.202	1.00	37.80	O
ATOM	3465	O	HOH W 397	7.614	49.728	38.071	1.00	41.25	O
ATOM	3466	O	HOH W 398	8.916	51.337	36.706	1.00	48.59	O
ATOM	3467	O	HOH W 399	15.317	50.679	39.636	1.00	46.68	O
ATOM	3468	O	HOH W 400	4.532	51.892	48.960	1.00	47.82	O
ATOM	3469	O	HOH W 401	13.524	46.668	52.360	1.00	62.04	O
ATOM	3470	O	HOH W 402	3.683	55.256	46.778	1.00	37.78	O
ATOM	3471	O	HOH W 403	2.458	51.152	44.379	1.00	50.95	O
ATOM	3472	O	HOH W 404	2.983	53.012	42.325	1.00	36.05	O
ATOM	3473	O	HOH W 405	4.732	53.716	40.157	1.00	45.14	O
ATOM	3474	O	HOH W 406	6.456	56.710	44.082	1.00	86.42	O
ATOM	3475	O	HOH W 407	17.941	55.792	26.404	1.00	27.09	O
ATOM	3476	O	HOH W 408	40.002	68.821	15.892	1.00	65.46	O
ATOM	3477	O	HOH W 409	41.230	62.050	29.064	1.00	67.35	O
ATOM	3478	O	HOH W 410	16.483	60.757	14.259	1.00	36.72	O
ATOM	3479	O	HOH W 411	-2.204	34.610	34.163	1.00	36.51	O
ATOM	3480	O	HOH W 412	-0.176	35.217	32.379	1.00	47.11	O
ATOM	3481	O	HOH W 413	4.922	56.684	-2.176	1.00	146.47	O
ATOM	3482	O	HOH W 414	0.875	31.745	51.442	1.00	48.72	O
ATOM	3483	O	HOH W 415	14.103	86.197	11.727	1.00	62.61	O
ATOM	3484	O	HOH W 416	-8.830	78.597	27.991	1.00	50.94	O
ATOM	3485	O	HOH W 417	31.675	47.524	36.707	1.00	37.03	O
ATOM	3486	O	HOH W 418	26.252	36.923	23.737	1.00	47.98	O
ATOM	3487	O	HOH W 419	-5.780	53.991	38.944	1.00	45.02	O